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# retro GAMER


COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO-GE

VERDICT: ANALOGUE  
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THE STORY OF  
**YIE AR KUNG-FU**

HOW KONAMI HELPED TO ESTABLISH  
TRADITIONAL FIGHTING GAMES

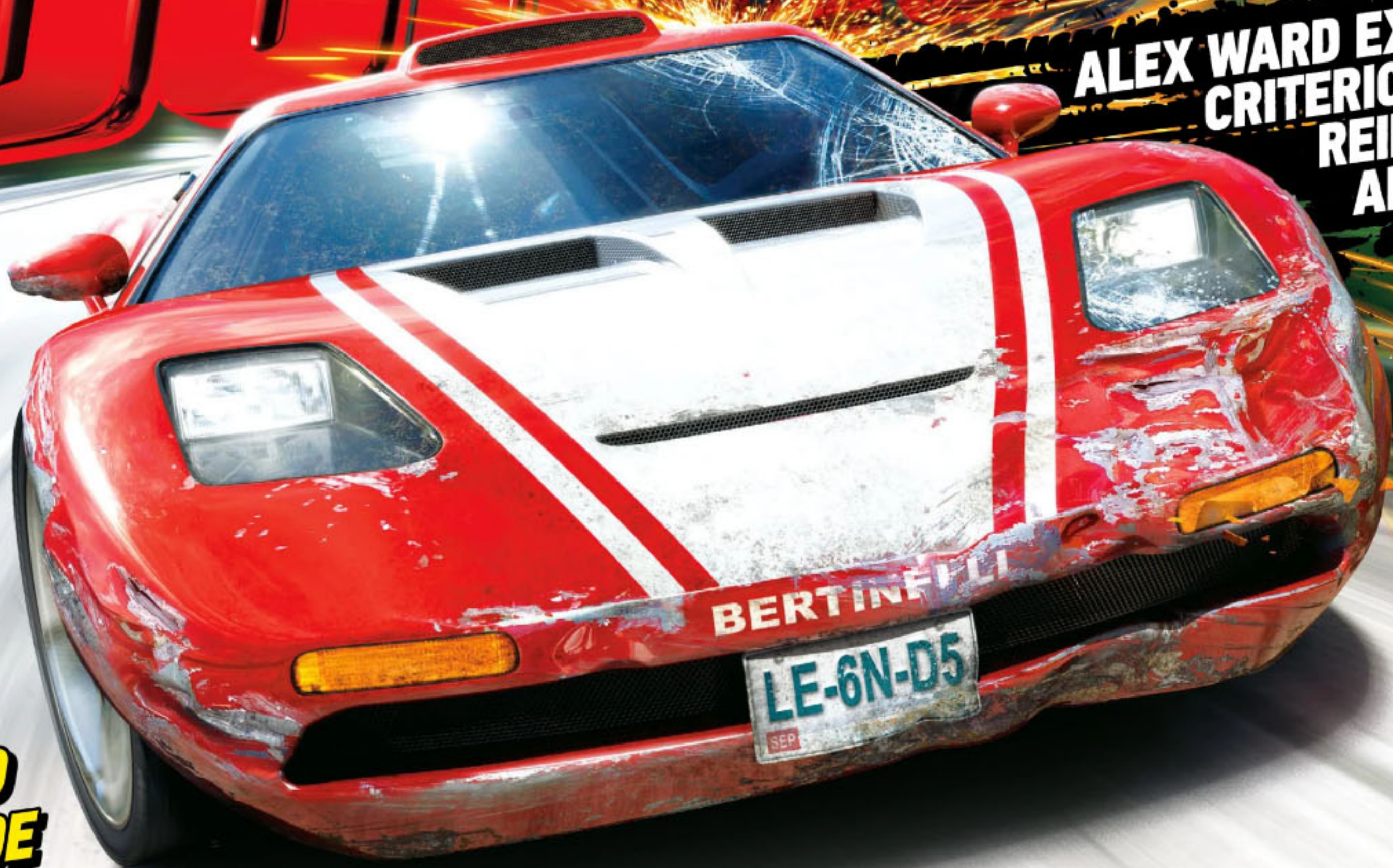



**MY ARCADE  
PAC-MAN  
OFFER**  
SEE PAGE 30

**THE INSIDE STORY**

# BURNOUT™

**ALEX WARD EXPLAINS HOW  
CRITERION SOFTWARE  
REINVENTED THE  
ARCADE RACER**



**ALSO  
INSIDE**

EARTHWORM JIM 2  
ARMY MEN  
GALAXIAN  
ULTRACORE  
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**ULTIMATE GUIDE  
SKOOL DAZE**

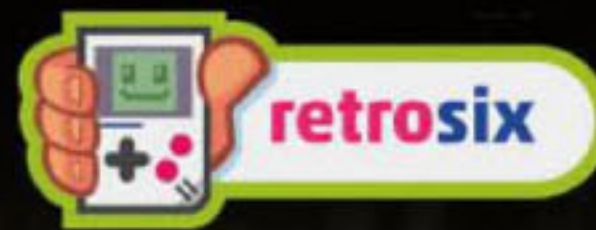
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# THE RETROBATES

WHAT'S YOUR FAVOURITE BURNOUT MODE?



## DARRAN JONES

Eliminator is where it's at for me. The constant ticking sound when you're in last place really ramps the tension up.

**Expertise:**

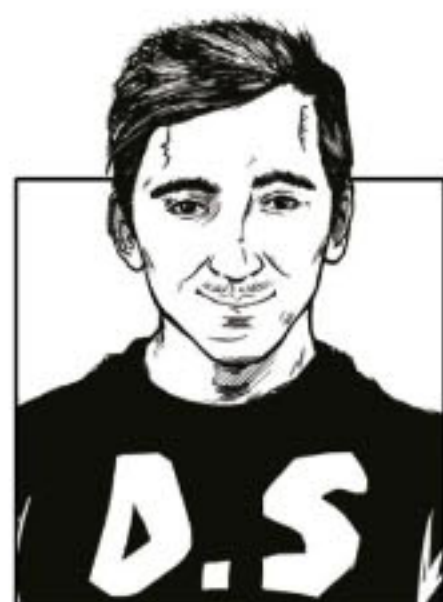
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

**Currently playing:**

*Panzer Dragoon Saga*

**Favourite game of all time:**

*Strider*



## DREW SLEEP

Road Rage, obviously. How else am I to accurately replicate the experience of driving on Britain's streets?

**Expertise:**

*Burnout*-themed mixtapes

**Currently playing:**

*The Witcher 3: Blood And Wine*

**Favourite game of all time:**

*Final Fantasy VIII*



## NICK THORPE

Coming from a family of car mechanics, I always loved a bit of Road Rage – it just felt like I was drumming up some good business.

**Expertise:**

Owning five Master Systems (I sold two)

**Currently playing:**

*Baba Is You*

**Favourite game of all time:**

*Sonic The Hedgehog*



I've always enjoyed the *Burnout* series, but then I was always going to. Ever since I was old enough to stand in front of an arcade steering wheel I've had a love affair with arcade racers. Granted, it's not been as torrid or as long as my obsession for a good shoot-'em-up, but it's always been there. For many years, games like *Out Run* and *Chase HQ* would scratch that itch, but I would always look for ways to obtain the exhilarating high that arcade racers gave you when I was at home.

The 32-bit generation sated my appetite plenty, thanks to the likes of *Daytona USA*, *Sega Rally* and *Ridge Racer*, but I'd argue that my favourite period for playing arcade racers was the Xbox era. I still play *OutRun 2006: Coast 2 Coast* religiously to this day, while the likes of *Ridge Racer V* and *Need for Speed: Hot Pursuit* can all be found in my permanent collection. Many of the games from Criterion's *Burnout* series also feature in that list, and I still vividly recall playing *Burnout 2* and *Burnout 3* in the *games™* offices, arguing over Crash tournaments and whether *Takedown* really did deserve the 10/10 we gave it. 15 years on and *Burnout 3* still feels as thrilling as it was in 2004, so it's a real pleasure to speak to Alex Ward about the hit series and *Dangerous Driving*, his spiritual successor.

Enjoy the magazine!



## WOZ BROWN

Laying out pages at breakneck speeds and clearing through as many spreads as possible without causing a crash on my Mac... oh, not that type of burnout, you say?

**Expertise:**

Never playing *Burnout*... ever!

**Currently playing:**

*Sega Mega Drive Classics*

**Favourite game of all time:**

*The Legend Of Zelda: Ocarina Of Time*



## GRAEME MASON

The original race mode will always have a special place in my heart. Automotive chaos at its best.

**Expertise:**

Adjusting the tape azimuth with a screwdriver

**Currently playing:**

*Dead Island*... again

**Favourite game of all time:**

*Resident Evil 4*



## PAUL ROSE

For me, it's all about replaying those crashes. Bring me some carnage!

**Expertise:**

Winging it

**Currently playing:**

*Monster Boy And The Cursed Kingdom*

**Favourite game of all time:**

*Half-Life 2*



## PAUL DRURY

*Burnout 2* is my favourite of the series, and I got really into its Crash mode. Admiring my carefully orchestrated destruction in slow motion was mesmerising.

**Expertise:**

Hannah Montana

**Currently playing:**

*Us Vs Them*

**Favourite game of all time:**

*Sheep In Space*



## PAUL WALKER-EMIG

Racing games aren't really my thing, but the *Burnout* series had me covered with the introduction of Crash mode, scratching an itch which hadn't really been satisfied for me since the original *Carmageddon*.

**Expertise:**

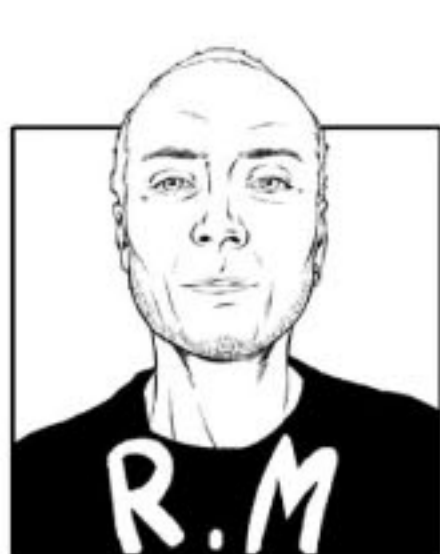
Pretentious indie games

**Currently playing:**

*Sekiro: Shadows Die Twice*

**Favourite game of all time:**

*Metal Gear Solid*



## RORY MILNE

It's *Burnout 3*'s Crash Mode for me. Getting paid to cause horrific pile-ups just never gets old, and winning a gold medal is the icing on the cake.

**Expertise:**

The game that I'm writing about at the time of writing

**Currently playing:**

*Superhero*

**Favourite game of all time:**

*Tempest*

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A pack of puppies are in mild peril, and it's up to our plucky Production Editor, and a dumb worm, to save them



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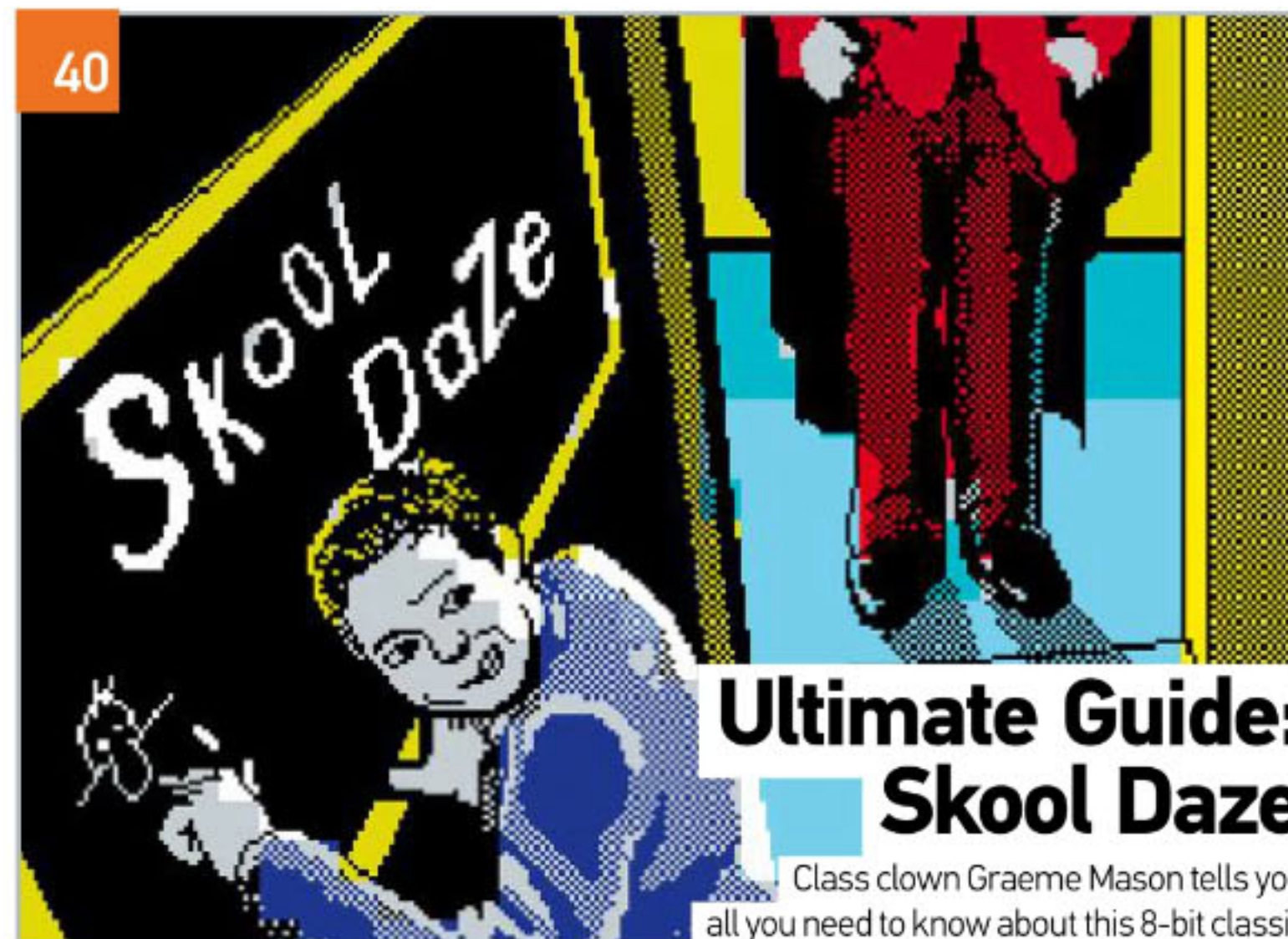
Trip Hawkins and Keith Bullen return to this satirical top-down action game that spawned countless sequels

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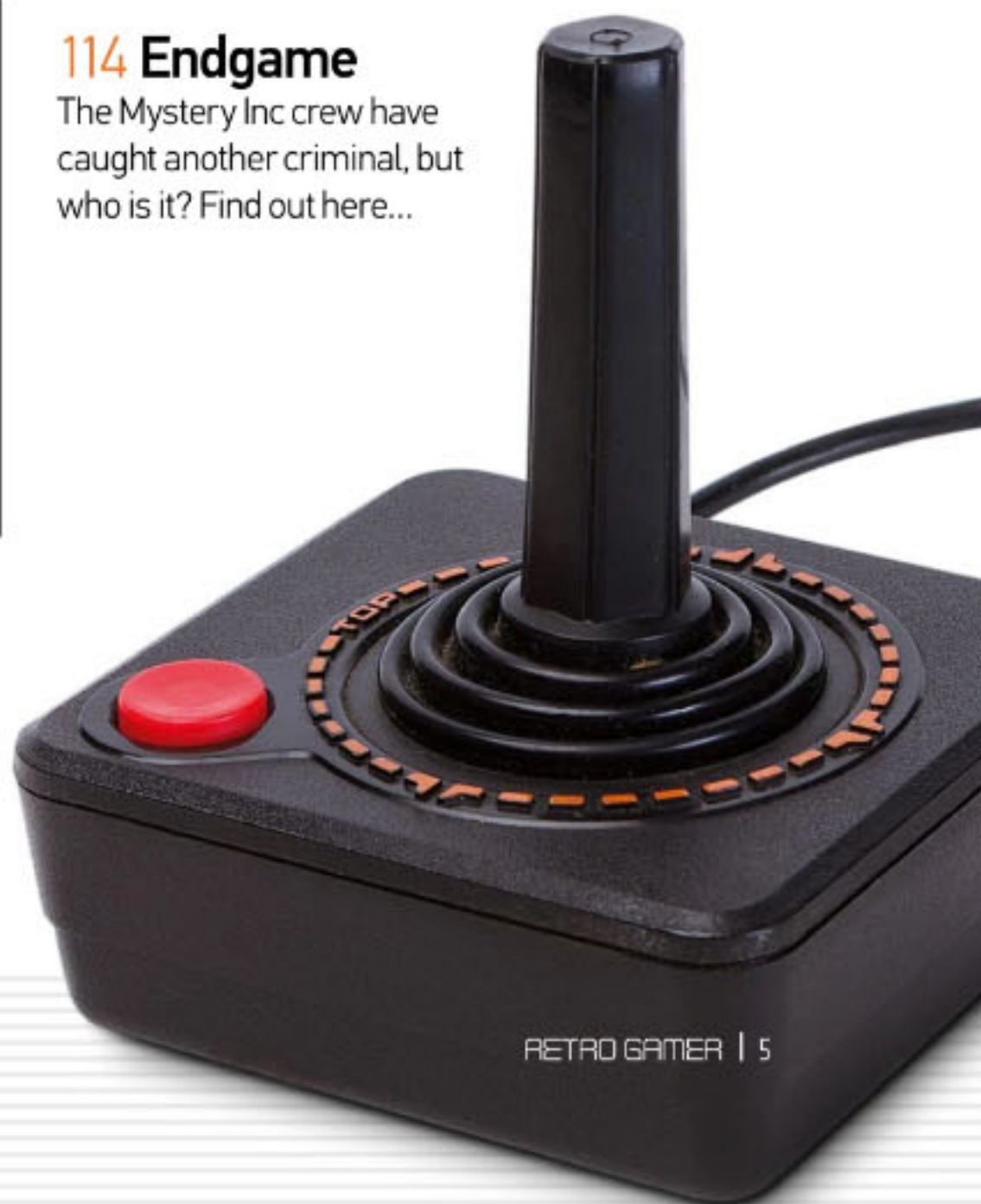
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» [Switch] *Thunder Force IV* is already available on Nintendo Switch, so we're hoping *Thunder Force III* is in the works.

## SEGA FOREVER

Rieko Kodama and Yosuke Okunari explain how developer M2 is keeping Sega's blue skies alive

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This month our columnist has got collecting games on his mind

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Nick does some time travelling, fixes his DeLorean and lands in June 2002

**W**hen it comes to the porting of classic games to new systems, M2 is the best in the business.

While it has made numerous original games in the past, the studio has become best known in recent years for the excellent work it's been doing for the *Sega Ages* range, a series that first began on Saturn and has since moved to both the PS2 and 3DS, and more recently, Nintendo's Switch. Sega's recent FES show saw M2 announced as the new developer behind the Mega Drive Mini and a bunch of new Switch ports, including *G-Loc* and *Shinobi*, so it seemed like the perfect opportunity to sit down with Sega's Rieko Kodama



» [Switch] M2's Switch version of *Alex Kidd in Miracle World* features a brand-new FM soundtrack.

and Yosuke Okunari to discover a little bit more about the partnership.

**How does Sega decide which games to release under the *Sega Ages* brand?**

**Rieko Kodama:** Some of the factors we consider are what was popular in the past, reactions to ports in recent years, survey responses, ideas from the development team and how difficult a game might be to port to keep releases consistent. We always strive to include challenging titles and do our best to be ready to port larger-scale games.

**You've worked with M2 for over ten years now. What makes M2 the right partner for such an important project like *Sega Ages*?**

**Yosuke Okunari:** M2 understands the importance of staying faithful to the original form of a title while porting it over. They also place a lot of care in the details – for example, a delay of a few frames between the controller inputs and [it] means a total loss of the game's charm to them.

Over the past ten years they have sequentially studied the history of Sega's home consoles and arcade

machine system boards. It's safe to say that they understand the inner workings of the hardware more than anybody else.



» Rieko Kodama is a producer at Sega and joined the company in the early Eighties.

***Sega Ages* games feature interesting and useful new features, such as automatic mapping in *Phantasy Star* and extra music in *Out Run*. How hard is it to add these features to the code of old games?**

**RK:** It differs for each title. We start by pooling together ideas from Sega, M2, the title's original staff and any other applicable sources. Due to the importance of releasing titles consistently, we first estimate how much additional content we can include in a short period of time before deciding which ideas would be best. The volume of additional content doesn't always equate to the difficulty of implementing it. If there's an element in a particular title that we feel is important to include, we'll adjust the schedule of all titles in



» [3DS] M2's 3DS ports are superb, and they often feature exceptional use of the system's 3D features.

order to accommodate prolonging that title's development.

**Sega has rarely re-released Model 1 arcade games in the past, but Virtua Racing is scheduled for a Sega Ages release. Why now?**

**YO:** The Model 1 is certainly one hardware we've wanted to take on before but couldn't during the past ten years. Because it was created before 3D technology had become what it is today, it took some time to fully analyse it. The soundboard was an extension from the System 24, so we began development with one of its titles, *Gain Ground*.

**Some of the games you originally worked on have been re-released for Sega Ages, including Phantasy Star and Sonic The Hedgehog. How does it feel to revisit them?**

**RK:** Picking these titles back up and replaying them brought back memories of the original team. The more I played, the more I remembered moments

like designing this tree graphic with this idea in mind, or redesigning this desert to be more suitable to this scenario, or communicating with the production staff. Revisiting old titles is a nostalgic experience for me, but it also forces me to remember how naive and inexperienced I was, which is a bit embarrassing. Despite the limited colour variety or capacity restrictions on just one screen, we always did our best to allow the world in our games to be enjoyable through its characters or through something as simple as background graphics.

**How long does each Sega Ages project take to complete?**

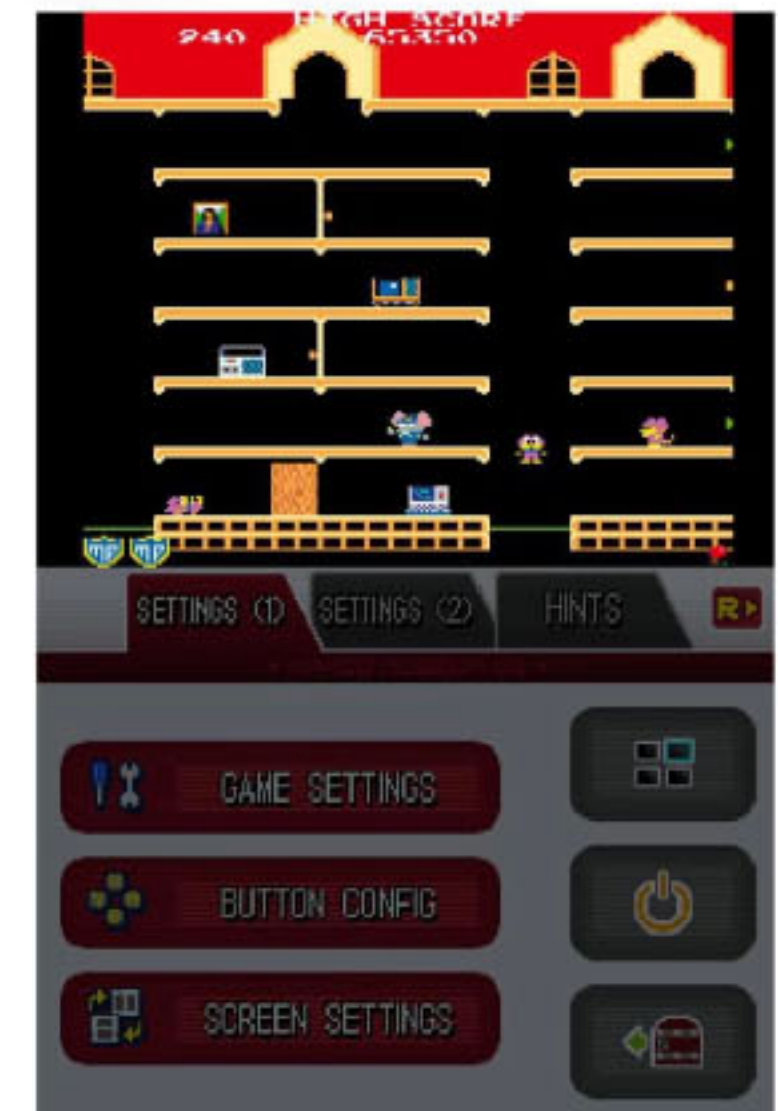
**YO:** As I mentioned earlier, it varies. For example, we have some titles that we haven't released yet but that we've been researching since the very beginning. In these cases, we may be able to shorten the development time, but there's no doubt that this is taking much longer than we had initially projected. To all of our fans who

**“ We always strive to include challenging titles and do our best to port larger-scale games ”**

Rieko Kodama



» Yosuke Okunari is heavily involved with the *Sega Ages* series and works directly with M2.



» [DS] M2 has also worked with companies such as Konami and Namco on various retro compilations.



» [PS2] Before M2 became involved, *Sega Ages* on PS2 was really hit and miss. This is a remake of *Alien Syndrome*.

are anxiously awaiting our upcoming releases, I am very sorry for the wait.

**Why have you released both Sega Ages and Sega Mega Drive Classics on Switch?**

**YO:** *Sega Mega Drive Classics* is best for casual players who want to enjoy the classics, while *Sega Ages* is for those who have familiarity with those titles or are looking for just one particular title. All titles are released, polished and optimised. We saw

potential for both on the market and acted accordingly. The winner will be apparent once all scheduled *Sega Ages* titles are released.

**Will the Sega Ages range head to other platforms?**

**RK:** The more opportunities there are for Sega games to be enjoyed, the better, so we aren't rejecting the prospect. However, all our current focus is on releasing all scheduled titles for the Nintendo Switch. ★



» [Mega Drive] *Castle Of Illusion's* inclusion shows Sega is serious about the Mega Drive Mini.

## DISNEY CLASSICS HIT THE MEGA DRIVE MINI

Sega's Mega Drive Mini is certainly generating a lot of good faith for the publisher. After being taken from AtGames, Sega went back to the drawing board and the device is now being overseen by M2. Ten more titles have also been announced for the 40-game system, including *Earthworm Jim*, *Contra: Hard Corps*, *Thunder Force III*, *Castle Of Illusion* and *World Of Illusion*. These last two are particularly important as it means that Sega has gone to the trouble of licensing games from Disney. Hopefully this means that *Aladdin* (the Mega Drive's third best-selling game) and possibly *Quackshot* could also make the final list.

Expect all 40 games to be revealed in the months leading up to the console's release. Hopefully EA, a company that was crucial to the Mega Drive's success in the west, will also be allowing a few games to appear on the highly anticipated device.

» The Mega Drive Mini does a great job of aping the artwork of the original Mega Drive box.



# CAPCOM GOES BIG

IS THIS THE ULTIMATE PLUG-AND-PLAY DEVICE?



» We love how wonderfully over-the-top this new plug-and-play device is. Amazingly, it's the cheapest way to legitimately own *Alien Vs Predator*.

Capcom sent the internet into a frenzy of excitement when it announced a plug-and-play device it's involved with. The Capcom Home Arcade is being published by Koch Media and is a gigantic joystick for two players in the shape of the famous Capcom logo. The ostentatious device is made from custom Sanyo parts, utilises the Final Burn emulator and runs 16 classic Capcom arcade games – including *Strider* [Yay! – Ed], *1944*:

*The Loop Master*, *Final Fight*, *Street Fighter II: Hyper Fighting* and *Alien Vs Predator*. The last game is particularly notable as it marks the first time it has ever been released for home use.

Wi-Fi is also built into the device allowing for online leaderboards, but we are hoping this means that additional game packs will become available for purchase as the 16 included games will only keep you going for so long. The eye-wateringly high price point of £199.99 is certainly

going to put some off, but this is clearly a premium product and it would appear that Koch isn't going for the same market as the SNES Mini and similarly priced devices.

One bone of contention with the device at the moment is the use of Final Burn, which is alleged to have been used without the permission of everyone who worked on the emulator. We have reached out to Koch Media for comment and should have more news next issue.

# MARI-NO

NINTENDO HALTS SUPER MARIO BROS PROJECT

The PDX Commodore Club recently released an incredibly impressive port of *Super Mario Bros* for the Commodore 64. The ambitious conversion has been seven years in the making and was created by Nintendo fan, ZeroPaige. Within four days of the game being made available, however, Nintendo stepped in issuing a cease and desist which saw the game being quickly taken down.

PDX Commodore Club was quick to respond to the news, taking the game down and issuing the following

statement on Twitter: "Good times. Due to a DMCA takedown notice we had to remove the *Super Mario Bros 64* download from our website blog post from four days ago." While the news has been met by a lot of outrage from unhappy C64 fans, it's worth noting that all Nintendo is doing is protecting its IP as the licence holder of *Super Mario*. Indeed, many have seen the order as a seal of approval from Nintendo and a testament to ZeroPaige's work. It will be interesting to see what ZeroPaige will be turning their attention to next. \*



» [C64] It's a shame ZeroPaige's game has been taken down, as it's a real showcase of their talent.



KONAMI



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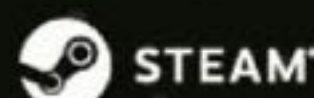
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### Joyzz Wireless Mega Drive Controller

This peripheral might be expensive, but it's definitely worth the money if you own Sega's 16-bit console. It's very well made and feels nice and robust in your hands. It's also exceptionally easy to set up as you can effectively plug it in and play. There is a compatibility mode for those troublesome games that don't work with traditional six-button joypads, and it's also compatible with the Master System. Best of all, the response time of 2.7ms means you won't have any issues at all while playing your favourite games, whether you're into hectic arcade blasters or sedate RPGs.

**Price:** £59.99

**From:** [retrotowers.co.uk](http://retrotowers.co.uk)

### Hey! Listen! A Journey Through The Golden Era Of Video Games

Not content with co-creating *Go 8 Bit*, Steve McNeil has now turned his attention to the evolution of videogames in a brand-new book. *Hey! Listen!* proves itself to be a very entertaining read and extremely funny in places, while highlighting just how obsessive a relationship with videogames can be.

**Price:** £12.48

**From:** [amazon.co.uk](http://amazon.co.uk)



### The Ultimate Guide To Fantasy Gaming

Our latest tome is rather special as it's dedicated to all things fantasy, whether they're gaming, card or board game-related. It includes classic articles from *Retro Gamer*, including pieces on *Ys*, *Final Fantasy* and *Zelda*, as well as new articles on classics such as the *Fighting Fantasy* books, *Magic: The Gathering* and *Lost Valley Of The Dinosaurs*.

**Price:** £12.99

**From:** [myfavouritemagazines.com](http://myfavouritemagazines.com)



### Retro Gaming Cables

Retro Gaming Cables has been evolving its leads for years now and we always find them to be of exceedingly good quality. The company covers virtually every system you can think of, and its PACKAPUNCH cable protects against external magnetic interference and crosstalk. The Saturn cable is particularly handy as it works on both PAL and NTSC systems.

**Price:** £23.99

**From:** [retrogamingcables.co.uk](http://retrogamingcables.co.uk)

PICK OF THE MONTH



### Project Sidologie

This expansive collection of SID tunes is performed by Marcel Donné and has been mastered by Allister Brimble. Spread across seven themed albums and a single audio DVD, it's an impressive collection of tunes that features everything from *RoboCop*, *Wizball* and *Driller* to an epic 25 minutes of *Tetris*. It's all finished off with stunning Giger-inspired artwork from Trevor Storey.

**Price:** £42

**From:** [c64audio.com](http://c64audio.com)

### We Love Atari

Like Tim Lapetino's excellent *The Art Of Atari*, Karl Morris' *We Love Atari* focuses more on imagery, but that's no bad thing. It's full of fascinating adverts and artwork from the time covered (1972 to 1996) and is filled with interesting anecdotes about the popular company, alongside its games and systems. It's a lovely gift for any Atari fan.

**Price:** €40

**From:** [zafinnbooks.com](http://zafinnbooks.com)

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Who is Paul Rose?

Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine Digitiser. These days, he mostly writes his videogame rambles over at [Digitiser2000.com](http://Digitiser2000.com). If you want more Biffo in your eyes, you can catch him as the host of Digitizer The Show at [www.bit.ly/biffo2000](http://www.bit.ly/biffo2000).



# Collecting thoughts



**I've never considered myself as a collector of videogames.**

It's a combination of factors, a major one of which is space. I sometimes look at the collections

featured in **Retro Gamer**, or watch game room tours on YouTube, and just wonder how anybody has a house big enough to store all that... stuff. Then I go down a rabbit hole of spiralling thoughts and think of all the other things collectors could've spent their money on, like a holiday.

I know, I know – we all have different interests, and priorities. I guess I've just never been organised enough to have a collection of anything. Or, at least, interested enough to force myself to be organised.

I have always seen games as disposable, in a way. You buy them, you finish them and move on to the next one. I don't think anybody who worked on those early games decades ago ever expected them

to become sought after by collectors. Admittedly, I still get a little tingle of nostalgic glee when handling some old hardware, or hear the start-up sound of a Game Boy. I just don't want those things cluttering up my house.

Not least, in fact, because the games systems I grew up with still feel like yesterday to me. Even the ZX Spectrum feels new when I pick one up. There's a strange cognitive dissonance I get when I realise it's almost 40 years old.

And yet... I have, in some way, started a little collection. I've been buying up stuff I never owned, and a lot of it predates the start of my time as a gamer. Specifically, I shelled out a small fortune on a bunch of pre-videogame Nintendo products.

I love Nintendo, I love Nintendo's philosophy – 'lateral thinking of withered technology' or whatever it is – and it fascinates me how it extends back to before it ever released a console.

Take the Ultra Hand: the first product Gunpei Yokoi ever designed for Nintendo, years before Game & Watch, the

Game Boy and Virtual Boy. It's basically a pair of extendable tongs, reconfigured as a toy, and it is genius in its simplicity. Likewise the bizarre periscope the company released, the handheld 'Love Tester', and a machine that fires baseballs.

What I admire about all of these early Nintendo toys (though released at a point when Nintendo had already existed as a company for decades) is how they demonstrate the way in which Nintendo has never deviated from the course it set early on. While some of the products it's released have been less successful than others – I'm looking at you, ROB – you still see it today in the flexibility of its Labo kits.

Because of this, there's something about buying up these items which feels, to me, more like archeology than collecting. It's about helping to preserve an era of gaming history which is all too often overlooked, because it is, in effect, pre-history. Just as we wouldn't have gotten the car without the invention of the wheel and the discovery of fire, we'd never have had the NES, Super NES, GameCube or Switch without the Ultra Hand. \*



“ Nintendo has never deviated from the course it set early on ”



Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer\_Mag [darran.jones@futurenet.com](mailto:darran.jones@futurenet.com)

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Photo: Natalie Lewis



# Stay tuned

Richard Lewis, the mind behind the retro music event Chip Bit Day, takes us backstage

**If you're a fan of 8-bit-style chiptune music you're probably already aware of the annual Chip Bit Day, which will be taking place on 15 June.** Now in its fourth year and featuring a talented selection of popular musicians from the scene, we decided to speak to event organiser Richard Lewis to find out a little more about the popular event.

## Where did the idea of Chip Bit Day originate from?

Chip Bit Day (CBD) originated in April 2016 to mark the first anniversary of my chiptune blog, Chip Bit Sid. I wanted to provide fans with a new event following the unfortunate demise of what was Britain's biggest chiptune festival, Superbyte, in 2015.

## What 8-bit music inspired you growing up?

I love the iconic *Super Mario* and *Tetris* Game Boy tunes. They loop over and over without getting tiring, and they made full use of the limited four sound channels of the Game Boy hardware. I particularly like the use of the simple 'clack' sound effect in *Tetris* and how it speeds up as the screen

fills, adding to the game's tension.

## Who do you consider to be the best 8-bit musicians from back in the day?

It's inspiring how Koji Kondo utilised the limited hardware to create timeless pieces of music for games like *Super Mario* and *Zelda*, that have not only stood the test of time, but are still being reimaged by musicians globally. While the system was before my time, I've an appreciation for Commodore 64 composers like Rob Hubbard and Martin Galway. They squeezed the most out of that sound chip and there are loads of acts influenced by them.

## What performers can we look forward to seeing at this year's Chip Bit Day?

I recommend catching STU on what is, amazingly, his UK debut. He has been creating Atari ST dance music since the early Noughties and played all over the world. Another recommendation is Monodeer, who creates some of the heaviest music heard on a Game Boy. Shortee is also a wonder to see, using a turntable to scratch vinyl alongside Game Boy sounds.



» When he's not running events like Chip Bit Day, Richard performs as Kojin.

## What kind of systems will be used at Chip Bit Day?

A variety of consoles, the staple ones being the Game Boy and Game Boy Advance due to their portability. STU's Atari ST is something that hasn't been seen at CBD before. Myths & Monsters will also be playing various synths and devices MIDI-controlled by a Game Boy, which is a sight to behold.

## What improvements have you made to this year's event compared to previous ones?

Last year I found the social media campaign to be in disarray, so this year I asked my friend Ste Whiley (Myths & Monsters) to help. What he's managed to achieve is [nothing] short of a great feat. Together, we've been posting everything from music videos full of facts about the booked artists to bespoke animations and interviews.

## What separates Chip Bit Day from similar events?

I try to make Chip Bit Day as unique as possible, from creating annual CD compilations to providing LED balloons. However, the one thing that separates CBD from

the others is free cake. I did this at the beginning of CBD as the event was more about the blog's anniversary but I have decided to continue, even adding a buffet into the mix.

## What do you think makes chiptune music so popular and draws in so many creators?

It's popular due to its strong relationship with videogames and many artists have gone on to produce soundtracks, such as Chipzel who has created music for games such as *Super Hexagon* and *Crypt Of The Necrodancer*. The rise of the internet has also created a thriving chiptune community, who can talk to each other whilst being thousands of miles apart. This community is inviting and willing to help teach newcomers, helping it flourish. ✨



» You can see Monodeer performing here, next to his trusty Game Boys.



Photo: Stephen McLeod Blythe



» If you're interested to learn more or purchase tickets, visit the crowdfunding page at [bit.ly/chipbitday19](http://bit.ly/chipbitday19).



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# BACK TO THE NOUGHTIES

**JUNE 2002** – Weren't we supposed to have a summer lull? This surprisingly high-profile selection of games suggests otherwise. Nick Thorpe travels back in time for superheroes, war heroes and the predecessor to Guitar Hero



**NEWS  
JUNE 2002**

**Lennox Lewis defeated Mike Tyson to retain the WBC and IBF heavyweight boxing championships in a match that took place in Memphis, Tennessee on 8 June.** The fight had been delayed from its original April date as many states refused to grant Tyson a licence following a press conference brawl. Although Tyson was able to keep pace in the first round, Lewis dominated the fight and knocked out the former champion in the eighth round.

On 22 June, Europe was declared polio-free by the WHO. Polio had previously been eradicated in the Americas in 1994, and this new elimination was a major milestone in the global effort to eradicate the disease, which had begun in 1988.

Brazil faced Germany in the final of the 2002 World Cup at the International Stadium in Yokohama, Japan, on 30 June. The South Americans were favoured over a defensively impressive German side that had been scoring few goals, and delivered on the prematch predictions with Ronaldo scoring both goals in a 2-0 victory. A number of records were set during the match: Germany suffered a record fourth finals loss, while Brazil set a record of five World Cup victories. The Brazilian captain Cafu also became the only player to appear in three consecutive World Cup finals.



[GameCube] Spidey-senses are tingling, but to be fair human sight could pick out that energy blast.

## THE LATEST NEWS FROM JUNE 2002

**W**e're often told how Spider-Man "does whatever a spider can", but we

didn't know that included being in multiple places at once. His film was dominating the box office, the soundtrack's lead single *Hero* was unavoidable, and your friendly neighbourhood arachno-bloke was also swinging his way onto consoles. But where the movie had Sam Raimi's excellent direction and the song had vocals from Chad Kroeger of the universally beloved Nickelback, the game wasn't quite up to those lofty standards. *Cube* complained of "a

bewildering camera, awkward controls and dull level design" in a 6.1/10 review, and *XBM* concurred, claiming it "needed an extra couple of months' work" and scoring it 6/10. *Official PlayStation 2 Magazine* was a bit more upbeat and scored it 7/10, but still felt that the game "would have benefitted from a *GTAIII*-style free-roaming cityscape". Maybe that would be a feature in a future sequel?

The big format exclusive of the month was the PS2's *Tekken 4*, with the press choosing to review the Japanese release rather than waiting for a UK version. *Play's* Simon Cann felt that the game "arguably represents the

pinnacle of the *Tekken* experience", but complained that "the only significant improvements to be made have been in the visual department" and that "you really would have expected something more substantial." Despite the criticisms, the game received 90%. *Edge* had broadly similar criticisms of the game and felt them representative of the state of the genre as a whole, claiming that "the terminal limitations of the traditional 3D fighter are already becoming apparent." Its review was rather less forgiving, with the game scoring only 6/10.

If you preferred guns and bombs to unarmed combat, EA's World War 2 shooter *Medal Of Honor: Frontline* also arrived on the PS2, to a broadly warm reception. *Play's* Will Johnston was positively bowled over by it, scoring it 98% and proclaiming "We've seen first-person shooters before, but nothing as superbly crafted as this." *Edge* was considerably less impressed with it, scoring it 5/10 and complaining of "slipshod coding", linear pathways and enemies that "appear at the same points and perform the same actions with mechanical predictability".



[PS2] Kazuya visited Bournemouth for the comic con, only to find himself scrapping with a dodgy cosplayer.



[PS2] It's a good job the enemy here is drunk, because the player is a terrible shot, too.



# CHARTS

## JUNE 2002

### PLAYSTATION 2

- 1 Gran Turismo 3: A-Spec (Sony)
- 2 Grand Theft Auto III (Rockstar)
- 3 Metal Gear Solid 2: Sons Of Liberty (Konami)
- 4 Tekken Tag Tournament (Sony)
- 5 Knockout Kings 2002 (EA)



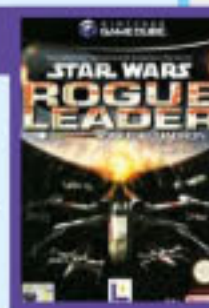
### XBOX

- 1 Halo: Combat Evolved (Microsoft)
- 2 Project Gotham Racing (Microsoft)
- 3 2002 FIFA World Cup (EA)
- 4 Max Payne (Rockstar)
- 5 Dead Or Alive 3 (Microsoft)



### GAMECUBE

- 1 Star Wars: Rogue Leader (Activision)
- 2 Luigi's Mansion (Nintendo)
- 3 2002 FIFA World Cup (EA)
- 4 The Simpsons Road Rage (EA)
- 5 Sonic Adventure 2 Battle (Infogrames)



### MUSIC

- 1 A Little Less Conversation (Elvis Versus JXL)
- 2 Love At First Sight (Kylie Minogue)
- 3 Get Over You/Move This Mountain (Sophie Ellis Bextor)
- 4 Hero (Chad Kroeger featuring Josey Scott)
- 5 Without Me (Eminem)



[PlayStation] Sony's ageing original console borrowed a game from even older hardware to add another classic to its ranks.



[Xbox] This solid game was sure to mech Xbox owners happy. [Nick, please stop. Please. - Ed.]

third-party offerings. Some of these were warmly received, such as *SSX Tricky*. Despite having an altered control scheme compared to the PS2 original and some framerate issues. It scored 7/10 in *XBM* and 8.8/10 in *Cube*. Less warmly received was *Spy Hunter*, which had suffered in the conversion process. *Cube's* 6.1/10 review claimed that the game was "absolutely ruined" due to a terrible framerate and substandard graphics. *XBM* had similar complaints but added a concern with the collision detection, noting that the new model "sees any car you bully 'boing' into the air or miraculously appear on the other side of your interceptor". These transgressions earned the game a scathing 4/10 review.

Last but not least, *PC Gamer* was very excited by *Soldier Of Fortune II: Double Helix*, awarding it 90% and its game of the month. Steve Brown had few criticisms beyond the "bland soft rock soundtracks", and heaped plenty of praise on the game. He was particularly impressed by the variety of levels and the increased importance of stealth, and felt that by moving beyond the shock value of the original game's dismemberments, "Raven have clearly poured a lot of effort into making an intelligent game and not just a seller."

Join us again next month, when we should start seeing the future of games (well, relatively speaking) at the annual E3 show. ★



[PS2] Frequency didn't end up selling well, perhaps because it was a bit abstract for many players' tastes.

But writing in *Official PlayStation 2 Magazine*, Ryan Butt's 9/10 review brushed such concerns aside, stating, "Pretty much any shortcoming can be forgiven when the gameplay is so fantastically thrilling and addictive."

Looking beyond the blockbusters, PS2 owners received some excellent musical treats. Harmonix unleashed *Frequency*, a game in which you had to activate various components of a song such as guitars, keyboards and vocals, then perform a juggling act to keep them all going. *The Official PS2 Magazine* gave it 8/10, proclaiming it "one of the most euphoric, compulsively

addictive, magnificently quirky titles" and *Play's* Stuart Messham felt that it was "the best interactive music package available on PS2," awarding it 82%. *Gitaroo Man* finally arrived on UK shelves too, earning 80% from *Play* and 8/10 from *Official PS2 Magazine*, with the latter calling it "perfectly silly" and "deliciously exuberant" but complaining of a "foot-stamping difficulty level". They were also able to partake of the most notable PlayStation game in a while, a conversion of SNK's excellent *Metal Slug X*. This received 90% in *Play*, with the reviewer commenting that "the 2D graphics put most recent PSone (and PS2) software to shame".

The newcomers in the console world had a quieter month. The most notable Xbox exclusive was *Gun Metal*, a tough shooter which allowed the player to switch between a walking mech and a fighter jet. *XBM* felt that it was "sure to please brainier fans" and awarded the game 8/10. Beyond that, both the GameCube and Xbox were catching up to the PS2 through numerous conversions of the market leader's

## THIS MONTH IN...



### XBM

Could Rare be about to bring its games to Xbox? Rumours suggested that the UK developer could be breaking ties with Nintendo and going multifomat, with talk of Activision bidding for the company. *XBM* chose to highlight certain games that might come to Xbox: *Perfect Dark Zero*, *Kameo*, *Conker's Bad Fur Day 2* and *Banjo-Kazooie 3*.



### NGC

Worlds collide, as Sega's Amusement Vision team is confirmed to be developing the next *F-Zero* game for GameCube and arcade. The announcement suggests that players will be able to use a GameCube memory card to transfer data between the two games, but details on what that entails are not forthcoming.



### Edge

Sega has abandoned the original cel-shaded look of *The House Of The Dead III*, and *Edge* is upset. The magazine also thinks Sega is banking on the forthcoming film to help sales, but believes "a budget of just \$12 million and an obscure German-born director, Uwe Boll, hardly inspire confidence". We're sure it'll all turn out just fine.

HI-SCORE  
00919

61600



# Formation Armed F

WORK CAN WAIT



» ARCADE » 1988 » MANJYUDO

**I used to love working at Tesco when I was in my late teens and early twenties.** I loved the people I hung around with (it's where I met my wife, Melanie), I loved the work and I loved the social life, which typically revolved around spending evenings after work at Poole's Tower Park Leisure Complex. It was a great period of my life, and was made even better thanks to the arcade games we had in our canteen. One of my favourite titles from that period was *Formation Armed F* – not because it was a great game, you understand, but because no other bugger at Tesco could ever beat my high score.

*Formation Armed F* sets itself apart from its shoot-'em-up brethren by featuring an innovative game mechanic which is hinted at in its title. There are no bombs in the game, but picking up a 'B' icon equips your ship with two handy side drones, which dole out additional firepower and can be used to absorb bullets. They can be enhanced further by picking up additional power-ups, like concentrated lasers and spinning discs of energy, and they can also fire forwards or backwards with a press of a button, which becomes very useful in the later stages.

Best of all, collecting a 'F' icon would allow you to detach your drones from your ship for a set amount of time, which became an essential strategy when I was caught in high score battles with Carl Fudge and Chris Dale. We would be constantly locked in face-offs on a Saturday afternoon when we should have probably been unloading cages of stock, and the use of those special attacks would often be what eventually separated us on the high score table.

Needless to say, I was keen for a home conversion but was left wanting as it was only ever released in Japan on NEC's PC Engine. When I eventually purchased a PC Engine, *GT Formation Armed F* was one of the first titles I purchased, but it never grabbed me in the same way that the original arcade game did. ★

» RETROREVIEW

11



# THE HISTORY OF **BURNOUT**



**ALEX WARD**

Concept designer,  
*Burnout series*

**AT A TIME WHEN REALISM AND RESTRAINT WERE FASHIONABLE IN RACING GAMES, CRITERION'S BURNOUT SERIES OFFERED A TURBO-CHARGED THRILL RIDE WITH MAJOR SPEED AND MASSIVE CRASHES. ALEX WARD DISCUSSES THE DEVELOPMENT OF A TRULY CLASSIC ARCADE RACING SERIES**

Words by Nick Thorpe & Darran Jones

**D**id you know that if you put a person inside a shiny metal contraption designed to go very fast, they suddenly become 12 times as likely to express hostility? It's a strange quirk of human psychology, but based on our entirely unscientific examination of the evidence, it's true – getting behind the wheel of a car can turn even the most patient anger management counsellor into an unrestrained rage monster. But the terrifying thing is that there's actually a simple way to make it considerably worse. Get a whole bunch of people in cars into one place, thereby clogging up the roads with traffic and ensuring that nobody can use the things. Within an hour,

the collective outpouring of animosity will have generated enough energy to power the whole of Wales for a month.

Unfortunately, the most fun solution to this problem is liable to get you killed, and nobody wants to be the subject of a news report containing the phrase 'splattered across the back of a dawdling Volvo'. Thankfully, *Burnout* is there to scratch that itch – unlike most racing games, it's a series where the cars that aren't involved in the race are just as important as the ones that are. All the races take place on public roads filled with regular traffic, encouraging you to drive dangerously to get ahead. It became one of the most acclaimed racing series in gaming during



» [GameCube] *Burnout* was inspired by high-speed chases in movies.

► the Noughties, but has since been left alone as its publisher has chosen to focus on other games.

**T**he original project started at Criterion Software as a PlayStation 2 game by the tentative name of *Shiny Red Car*, which was inspired by a French short film by the name of *Rendezvous*, and the movie *Ronin*. The films showed cars being driven through the streets of Paris at high speed, and this provided the basic concept of driving through dangerous urban environments. "We looked at a lot of movie car chases," says Alex Ward, the concept designer of the *Burnout* series. "The DVD market was just starting out so we imported a lot of American movies. The chase from *Basic Instinct* and a chase sequence from the film *Against All Odds* were two sequences we pretty much put into the software."

The silver screen wasn't the only source from which Criterion drew inspiration, though, as plenty of other games were drawn from. "Traffic was there because I was wanting to make something like EA Canada's original 3DO *Need For Speed* – it was about 'high-speed driving' on real roads. Real roads mean traffic. Traffic means crashes. All the

other games were about simulating motorsports." As a result, few of the other games that the team looked at were traditional racing games, instead being driving action games that offered the ability to dodge and weave through traffic. "From the arcades, games like *Thrill Drive*, *Crazy Taxi*, *Emergency Call Ambulance* and even *Jambo Safari* were all things that had an influence."

But *Burnout's* unique selling point was developed after a meeting at EA Canada, while Criterion was shopping the game around to potential publishers. Hanno Lemke challenged Alex and studio head Fiona Sperry to create a compelling reason for players to drive into oncoming traffic. The result was the boost mechanic, which rewarded dangerous driving with extra speed. Dangerous actions such as drifting, going airborne, driving into oncoming traffic and passing close to other cars built up the boost bar, while crashing would reduce it. Once it had been filled, you could spend the boost bar for a limited burst of additional speed – and if you managed to use the whole thing in one go, you were rewarded with even more, alongside anything you accumulated while boosting. Skilled players could

## "REAL ROADS MEAN TRAFFIC. TRAFFIC MEANS CRASHES"

Alex Ward

## DRIVING MISS CRAZY Cool vehicles you'll want to wreck



### BUS

■ This bus is clearly inspired by the Keanu Reeves action film, *The Bus That Couldn't Slow Down*. Unlock it by beating Face Off 4.

### COP CAR

■ First introduced in *Burnout 2*, the Cop Car has excellent top speed with great handling and acceleration. Win Pursuit 1 in order to unlock it.



### DRIVER'S ED

■ Slow and steady may help you pass your driving test, but it won't help you in *Burnout 2*. Get Gold on all Offensive Driving 101 lessons and this is yours.

### FIRE TRUCK

■ *Burnout 3: Takedown's* Fire Truck is not only the fastest Crash vehicle, it's also blessed with tremendous Crashbreaker power. Complete all ten Crash Headlines to unlock it.



### MADDEN CHALLENGE BUS

■ You unlock this weighty tie-in vehicle in *Burnout Revenge* by merely having a *Madden NFL 2006* save game when you make your profile.



» [PS2] The series' technical performance is always rock-solid, no matter how what objects are flying about on-screen.

execute a burnout chain, draining and refilling the boost bar as long as they didn't crash.

Of course, avoiding crashes was easier said than done. There was little margin for error in the original *Burnout* – the slightest brush against traffic was liable to send your car into a graceful pirouette down the road, or just as likely a flipping, messy wreck. They weren't pleasant to get into, but the Criterion team made the most of them anyway, showing off your failure from a variety of angles and even providing a 'Worst Drivers' high score table showing who had caused the most damage during races. These certainly helped soften the blow, but in a game where crashing was so ruinous, why was so much effort invested in crashes in the first place? "It's because they are entertaining and exciting to see," replies Alex. "Only a few games had them. *Out Run* and *Thrill Drive* in the arcades, and 3DO *Need For Speed*."

The original *Burnout* was a rock-solid arcade racer, featuring the usual checkpoint-based single race and championship modes, plus fun extras like a survival mode. The game was

released for PS2 in November 2001 with Acclaim doing the publishing duties, and versions for the GameCube and Xbox followed in the spring of 2002. All three were received positively by the press. *Edge* scored the initial PS2 release 8/10, cautioning that it "isn't the longest game in the world" but that a lap of successful risk-taking "ranks alongside the best moments this pastime has to offer". *Play* gave the game 77%, offering the criticism that "*Burnout's* unique selling point (namely its 'horrific' crashes) exists only in direct opposition to the primary requirements of success – namely the intention and ability to avoid

» The high-speed crash-filled game design made the *Burnout* series stand out from its more simulation-focused rivals.



### REVENGE RACER

■ This insanely fast vehicle features in *Burnout Revenge* and has a top speed of 209 mph (which rises to 240 mph when drift jumping). You'll need a 100 per cent completion rate to unlock it, though.



### ASSASSIN MUSCLE

■ All the Assassin vehicles are good options, but we've got a soft spot for *Takedown's* muscle variant. It excels in Road Rage events and races.

### CUSTOM COUPE

■ You'd expect a vehicle that features on *Burnout 2's* cover to be good, and the Custom Coupe doesn't disappoint. It would go on to appear in four other *Burnout* games.



### WORLD CIRCUIT RACER

■ Got a death wish? Then let us recommend this beast, which is the last vehicle to unlock in *Takedown's* Race mode. Its control and weight aren't the best, but by gum it's fast.

### LOW RIDER

■ This is an absolutely terrible choice if you're choosing a race, but it's great if you're planning some spicy takedowns. Unlock it in *Revenge* by completing Angel Valley Challenge Sheet.



▶ other vehicles." *Official PlayStation 2 Magazine* and *XBM* also both scored the game 8/10.

A sequel quickly went into production and once again, there was cinematic inspiration for the team at Criterion. "Funnily enough we saw *The Fast And The Furious* right before we started. We had a feeling it would be huge and pretty influential," says Alex. "So we thought we'd 'have a bit of that' in the game. I'm not quite sure we did. Still, it became something that me and Chris Roberts [designer] laughed about a lot over the years." *Burnout 2: Point Of Impact* improved the visual appearance, that being a goal in particular with Alex confessing, "I don't think any of us were happy with the HUD and level of presentation we got to for the first game." While the racing stayed pretty similar between games, the sequel did expand on the ideas of the original. Point To Point races were added as a change from the circuit-based tracks, and the new Pursuit mode was a *Chase HQ*-style affair, which saw players given a cop car and tasked with chasing down criminals in order to unlock their cars. This was the first element of combat introduced to the series, a part of the design that would become a much bigger deal later on.

But the most important new mode was the Crash mode. "It started off by seeing people play the game at E3 and just have no idea what was happening on-screen," Alex explains. With the original game's emphasis on spectacular crashes and monetary values assigned to all of your damage, it's easy to see people could misinterpret the aim of the game. "A few games had tried some sort of 'arena crashing' mode but we didn't think much of them. Chris Roberts found a PC game mode featuring toy cars that looked interesting. It sort of spawned from there really." The new mode actively encouraged the player to cause the spectacular pile-ups that the game was capable of displaying, with the goal of causing the most damage possible. Alex describes it as "akin to ten-pin bowling with a car," and that's a pretty good way of describing it.

**D**espite the UK government's condemnation of its marketing campaign, which saw publisher Acclaim offer to pay all speeding fines on the game's launch day ("That sort of stuff was nothing to do with us," Alex clarifies), *Burnout 2* sold well and impressed the critics. The game launched in the autumn of 2002 for PS2, and versions for the Xbox and GameCube followed in the spring of 2003. In an 8/10 review, *Official PlayStation 2 Magazine* stated "many of the ideas at work here are hardly revolutionary, but they succeed because they're so well executed". *Edge* was just as impressed, scoring the game 8/10 and praising it as "the perfect embodiment of the 'bigger, better, more' sequel mentality". The versions on Microsoft and Nintendo's consoles were similarly successful with the press, and the stage was set for another game.

The first thing that changed with *Burnout 3* was the publisher, as Criterion had attracted the



» [PS2] The original game focused on avoiding crashes, but *Burnout 2* indulged your desire to create huge pile-ups with Crash mode.

attention of an industry behemoth. "For various reasons we signed with EA for the third game," Alex recalls. "Don Matrick's nephew Bruce McMillan came to see us after we'd walked away from working on a reboot of *Skate Or Die* with [an] ill-fated Chertsey group for a year." The negative experience of that project caused Criterion to request a high degree of autonomy with *Burnout 3*, and EA largely granted it – but ultimately, Alex credits them with helping to focus the game's vision. "The EA folks were pretty smart and helped us push to find what they called 'the big X on the wall' – something to align everyone and everything behind. That X was 'aggressive racing required' and takedowns became the name for the best thing you could do in our games, which was smack someone into oncoming traffic. I think Paul Glancey called them 'knockouts' but 'takedowns' sounded a lot more American."

*Burnout 3: Takedown* overhauled the racing model of the series into a much more combat-oriented experience. Takedowns were the biggest new factor – instead of avoiding collisions, you were now encouraged to cause your opponents to crash by smashing them into walls and traffic. To aid and encourage takedowns, the boost bar could be used at any time and would be extended and

» People uninitiated into the ways of *Burnout* might call something like this a 'near miss' but we call it 'filling up our boost bar'.







» [PS2] Even while using the boost, it's important to keep driving dangerously to earn more boost and start a burnout chain.

## "EVERYONE WORKED HARD AND GOING TO E3 FELT LIKE A MILITARY OPERATION"

Alex Ward

refilled with each successful takedown. The new focus even allowed for new modes like Road Rage.

Surprisingly, the game was up and running very quickly. A *games™* retrospective noted that the game was "presentation and effects aside, shockingly close to the finished game" after just six months of development time. "I think it was the only Criterion project where we had stable tools and a stable codebase after two previous titles," says Alex. "Plus we had the whole company on the project. We had something to prove to EA and we wanted to show them that we truly were one of the best teams on the planet at that moment on PS2. That game shows that we were." That level of confidence was justified by the fact that development was going so smoothly. "We had a lot of stuff done in the first few months and started 'the ship year' in a good place. After that it got better and better and we were so ready for E3 it was incredible," Alex reminisces. "Everyone worked hard and going to E3 felt like a military operation. I'll never forget us rolling into downtown LA in a fleet of three Cadillac SUVs in convoy. We went to rule that E3 and we did."

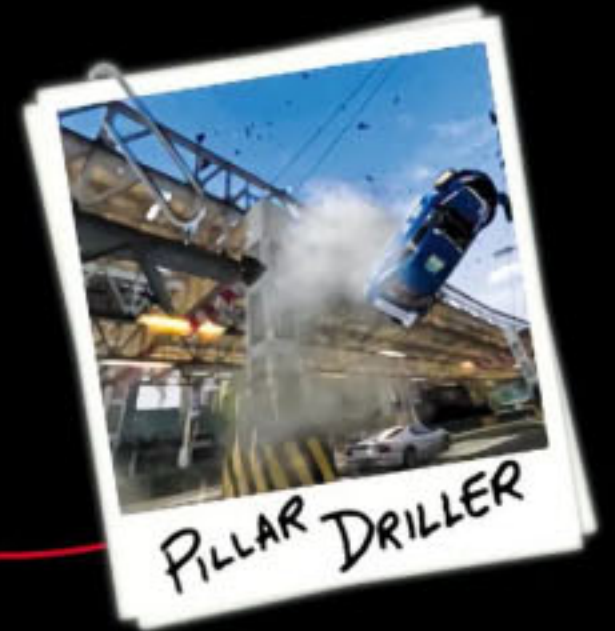
The finished game had every bit of the big budget sheen you would expect from an EA game of that time. The game was visually astonishing, offering a true step up while maintaining the 60fps update of its predecessors, with crashes that put even those of the previous games in the shade. The soundtrack was rammed full of licensed artists from Franz Ferdinand to My Chemical Romance. The game even included online play, after EA's well-publicised spat with Microsoft over Xbox Live ended. "We were the first game at E3 that EA had on Xbox Live. They told us in April and the show was in May. Their internal teams knew back in December yet none of them had anything online at that show," recalls Alex. ▶

## SCENES OF DESTRUCTION

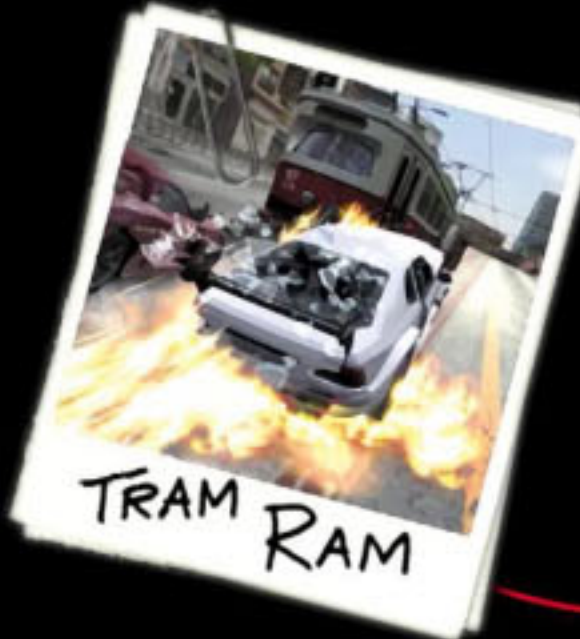
THE HISTORY OF: BURNOUT

The signature takedowns of Burnout 3 were a satisfying way to add a little spice to your destructive endeavours

While you're battling under the railway tracks in Downtown, send one of your rivals into a pillar to unlock this treasured memory.



PILLAR DRILLER



TRAM RAM

Take out your frustrations with the public transport system by carefully guiding a car into a tram, at about 120 miles per hour.

If we've learned anything from Top Gear, it's that caravans are crap. Your rivals will think so too, once they're embedded in one.



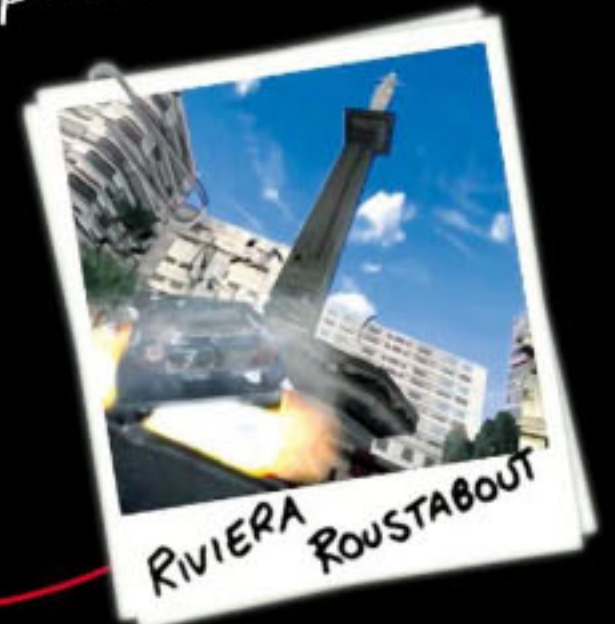
HOME WRECKER



PAID THE PRICE!

A high-powered sports car must easily cover any road toll, even as scrap - right? Gift one to the toll booth to receive this photo.

We'd love to pretend that this takedown at Riviera is here for a good reason, but we did it so we could print the word 'roustabout'.



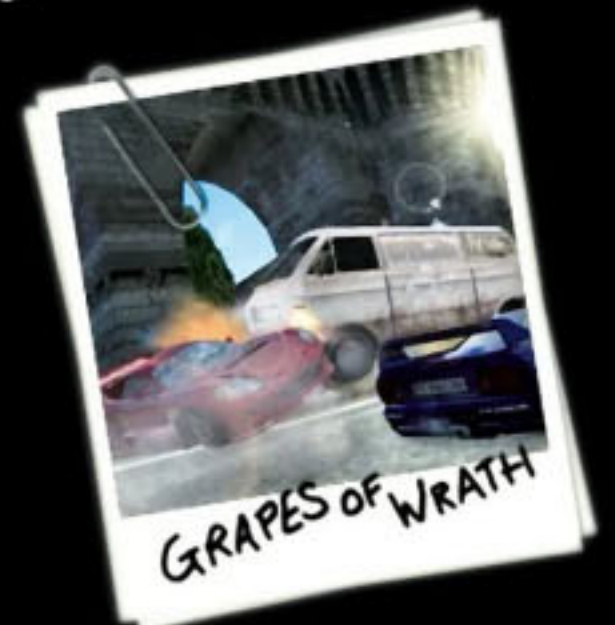
RIVIERA ROUSTABOUT



SNOWED UNDER

Earn this by taking down an opponent on a snow plough in Winter City. Also, sing: 'Call Mr Plow, he brings pain, that name again is Mr Plow.'

It's easy to get smashed on wine, and in the Vineyard it's easy to get smashed into a wine delivery van. Be the smasher, not the smashee.



GRAPES OF WRATH



» [PS2] The camera comes away from the player vehicle during takedowns, allowing you to admire your destructive handiwork.



» [PS2] *Burnout 3* was a big visual upgrade – cars and environments and special effects were given a new lick of paint.

► Once again, though, this development would have been more difficult without the assistance of the publisher. “The networking side of the game was handled by Paul Ross and Amy Phillips. They used and adapted existing EA technology that had been used for the sports games. Things were a lot different back then and they did a very good job.”

*Burnout 3: Takedown* was released in September 2004 for PS2 and Xbox, and became the series’ best reviewed game and one of the most critically acclaimed games of any kind. The game earned 9/10 from *Edge*, which praised the “confidently revised dynamic” of the racing model and described the game as “Criterion Games’ finest hour”. The game also received the full 10/10 from *games™*, which noted that while it wasn’t a realistic game, nor one which offered much in the way of customisation, it was “the most fun we’ve ever had with any racing game”. *Burnout 3* went straight to number one in the all-formats chart and hung around the top ten for a couple of months. More than any other, this game would become the reference point for future *Burnout* games, and it was so good that EA acquired Criterion.

**B**urnout *Revenge* developed the formula with the introduction of the traffic check – a move which allowed players to use civilian cars to their advantage.

By ramming traffic from behind, you could send it careening across the road, taking out further cars and potentially your opponents. “That came from wanting to explore how many cars we could draw on-screen at once, and what density of traffic we had,” Alex explains. The game also emphasised the ‘revenge takedown’, a takedown performed on the last car to perform a takedown on you – and this was largely a branding decision. “The original name for the game was *Burnout 4: Rush Hour*. We were overruled by some posturing American idiot who told us that ‘no successful game could ever have a four or a five after its name’ and then they didn’t like ‘Rush Hour’, so then they said ‘get your revenge on rush hour’ and ‘revenge’ stuck. I didn’t like it then and still don’t,” says Alex. “The mode was a bit messy but I have good memories of working through the night with Hamish Young, Chris Roberts and Richard Franke trying to fix the many things that went wrong on that

## PREPARE TO RACE

Our favourite game modes of the Burnout series



### ROAD RAGE

**INTRODUCED IN: BURNOUT 3**

■ As its name suggests, this game mode from *Burnout 3* is all about causing as much carnage as possible. Drive flashy, drive dangerously. Hell, you can drive however you like. Just be sure to score as many takedowns as possible in the required time limit. Multiplayer variants are also available.

### SURVIVAL

**INTRODUCED IN: BURNOUT**

■ While the *Burnout* series has always been about mayhem, Survival takes a more cautious approach. Racing is still the order of the day, but here you have to get as far as possible without getting in a collision of any kind. It’s a lot harder than it sounds.



### RACE

**INTRODUCED IN: BURNOUT**

■ There are plenty of racing games where you have to finish ahead of your opponents, and the *Burnout* series is no different. The difference, of course, is that *Burnout* encourages you to take risks and drive dangerously, which might not be very sporting, but does become a lot of fun.

### ELIMINATOR

**INTRODUCED IN: BURNOUT 3**

■ More pedal to the metal racing, but here you’ll want to stay far away from last position. Stay ahead of the pack by whatever means possible because if you come in last at the end of each lap you’re not going to be given a chance to finish the race.



### CRASH

**INTRODUCED IN: BURNOUT 2**

■ This highly entertaining mode has become a firm favourite with fans and is great fun in multiplayer. At its core, Crash is all about getting the high score, and you do that by careening your chosen vehicle into heavily populated crash zones, causing as much insurance damage as possible.

# LITTLE LEGENDS

Burnout Legends took the series into portable territory with a 'best of' compilation – was it a smash hit?



Sony's PSP promised to bring console-quality 3D gaming to the handheld arena, and EA's attempt to deliver on that promise came in the form of *Burnout Legends*. Rather than attempting a conversion of *Burnout Revenge*, the developer chose to compile some of the best bits of the series' first three games. Most of the tracks came from *Burnout 2* and *Burnout 3*, with a single one from the original game, and the driving model was carried over from *Burnout 3*. The game was well received, scoring 9/10 in *games™* and 7/10 in *Edge*, with the latter's biggest criticism being that "there's nothing here to keep you away from the bigger brother versions, unless you're always playing away from home".

*Legends* also appeared for the Nintendo DS. The conversion was handled by Visual Impact, a team which had made a name for itself by creating a variety of 3D games on the Game Boy Advance. Unfortunately, the DS version of *Burnout Legends* was akin to the smouldering wreckage that is so commonly seen in the series, as the game featured a woeful handling model, dodgy collision detection, a poor sense of speed and very little traffic.

» The PSP version of *Legends* shoots ahead of its DS counterpart by a mile.



» [PS2] Traffic Attack was centred on *Revenge's* signature traffic check mechanic, and challenged you to cause chaos.

## "WE WERE OVERRULED BY SOME POSTURING AMERICAN IDIOT"

Alex Ward

development. I did like the progressive scoring that Hamish implemented – hot shot, trick shot, money shot – that stuff was brilliant."

*Burnout Revenge* was launched in September 2005 for PS2 and Xbox and went straight to the top of the charts again, as well as earning praise from the press. While *GamesMaster* felt that the new Traffic Attack mode wasn't too great as "the way to win tends to be driving slower and making sure you hit everything", it praised the game as "virtually flawless" in a 95% review. *PSM2* felt that the new traffic check was "un-Burnout" as it removed the element of danger from much of the game's traffic, but still praised the game for being "hugely exciting and laden with instantly-rewarding fun," scoring the game 93%. *Burnout Revenge* also showed up on Xbox 360 six months later. "This was because the market was tough at that time. New platforms came out, and naturally EA wanted all their games on every platform. That became our first HD game," says Alex. But it wasn't the next-gen experience that its successor would ultimately offer – with development time being limited, only so much could be done to improve the game. "Hardware didn't really allow us to do that much without starting all over again. We 'spanked' all the textures, fixed a few bugs

and came up with a cool 'save and share' experience where you could upload all your best moments to Xbox Live." *Xbox World 360* scored the game 87%, praising it as a "showcase version" but noting it offered little over the previous generation's versions.

With the next major *Burnout* game for HD consoles still some way off, *Burnout Dominator* was released for PS2 and PSP in the spring of 2007. This game attempted to blend the mechanics of the earlier *Burnout* games with the combat sensibilities of the more recent ones. Takedowns were included and featured prominently, but the traffic check was ditched and the burnout mechanic was revived – you could still boost at any time, but if you waited until you had a full boost bar, you could earn boost while boosting and start a burnout chain. The new Burnout Challenge mode emphasised this mechanic, while the Maniac mode encouraged players to rack up a high score by driving dangerously without crashing. The game was reviewed well, but not to the same extent as previous games. *Edge* awarded the game 7/10, calling it "undeniably exciting and well-formed" but felt that the game was a stopgap and

### COPS AND ROBBERS

INTRODUCED IN: BURNOUT PARADISE

■ In the old days, playing Cops And Robbers meant you split into teams and chased after your mates on your BMX until only one was left. *Burnout Paradise* takes a different approach and is effectively capture the flag. This exclusive DLC also added police skins for 33 of the game's cars.



### GRAND PRIX

INTRODUCED IN: BURNOUT 2

■ As you'd expect, this is a selection of races that awards you with a trophy upon completion. You have to score the most points to win the Grand Prix (of which there are eight in *Burnout 2*) and handily you don't have to finish the entire championship in a single sitting.

### CRASHBREAKER EVENTS

INTRODUCED IN: BURNOUT REVENGE

■ This mode adds the crashbreaker mechanic to Eliminator, GP, Race and Road Rage events. They play out as normal, except you can blow up your vehicle along the way, taking rivals with you. Careful though, as you can only detonate your vehicle once.



### FACE-OFF

INTRODUCED IN: BURNOUT

■ Sometimes it's not just enough to beat your opponent in a race – you want to rub their face in it, too. Face-Off caters for this by putting you up against a string of increasingly tougher opponents who have to hand their vehicle over to you upon being beat.

### BURNING LAP

INTRODUCED IN: BURNOUT 3

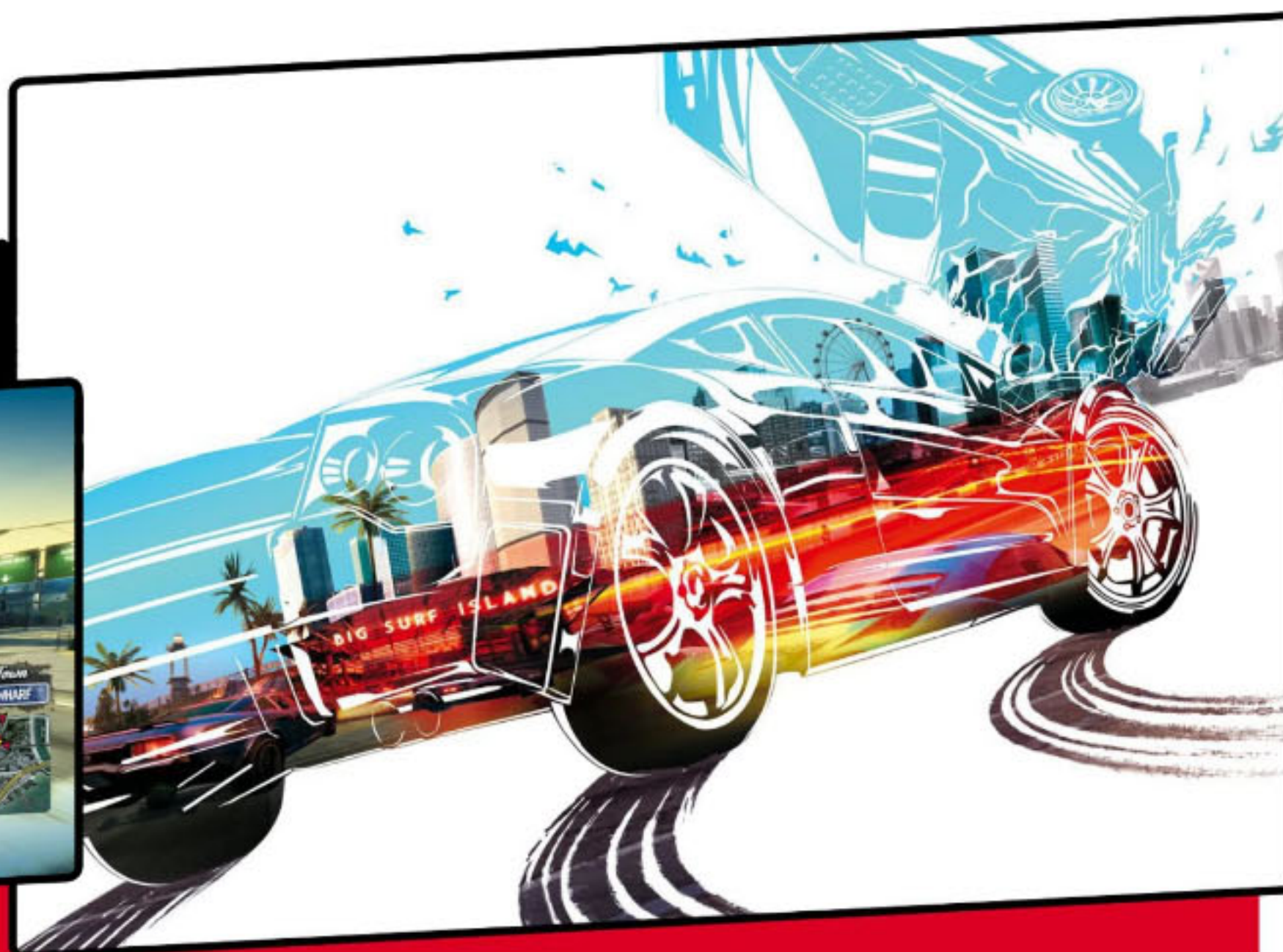
■ Every arcade racing game needs a great time attack mode to keep the excitement levels up, and we love how it's implemented in the *Burnout* series. Burning Lap requires you to complete a lap in a specific time, with a Bronze, Silver or Gold medal being awarded depending on how fast you finish.



» *Burnout Paradise* has some fantastic art. Look out for it on our cover in 2023.



» [PC] "Take me down to the Paradise City where the cars aren't clean and the roads are gritty."



► criticised the omission of Crash mode, which it felt was "sure to baffle and infuriate long-time fans". *PSM3* gave it 81%, complaining of a sense that it was "trying to shoehorn two separate types of racer onto one disc to please everyone."

The next game in the series was the true leap into the HD era. Instead of featuring closed circuits and point-to-point races, *Burnout Paradise* took place in Paradise City, a full open world environment which hosted a variety of both classic *Burnout* events and new challenges. "The game was really about learning and exploring the city. The game was just something that you did whilst doing that," says Alex. "My mantra for it was 'not playing the game is the game' (which was pretty risky) – I'm lucky that Fiona, Hamish, Matt, Craig, Pete and PG all went along with it as well."

**G**iven that he has said how radical and risky a shift this was, we couldn't help but wonder why Alex and the team would choose such a design.

"Two reasons," says Alex when asked. "Firstly, I was really into open-world games, especially *Mercenaries* by Pandemic. It dawned on me that 'the world is the game' and you could have many, many hours of fun just exploring and doing things different ways." That's not so surprising, as 3D open world games had become enormously popular over the course of the early Noughties. The second reason is more surprising, though. "After four games most of our artists didn't quite get on with each other," Alex reveals. "Tracks tended to be made by a single person for the whole development. An open-world game would force them to collaborate and communicate and hopefully we'd get a better result, better game and better team." Using the game design to resolve internal studio tensions is an interesting approach,

and not one we're sure we've heard of before. But before any developers reading this get any ideas, Alex is quick to note that the intended result was not achieved. "But looking back that was because the tools and workflows were horrific," he says. "We were totally not ready to move to PS3 and not ready to do anything other than 'make PS2 games on PS3' so it became a massive headache. It was okay in the end, but not quite worth the hardship endured by everyone who worked on it."

In fact, Alex remembers the game being a difficult development in general. "That one is all about HUD and navigation really. We weren't that great at those things," he explains. This was a hugely important factor, as the racing model of the game didn't specify routes within the open world – you were free to reach the goal any way you liked. This meant that traditional directional indicators were useless, and the team had to come up with its own solution. "I think we sort of got there in the end. I liked what we did with the overhead road signs and I remember making the decision to make all the races end at compass points on the map." Limiting the number of finish lines helped to reduce the burden on the player, as they typically knew where they were going and mostly had to keep an eye on how they were getting there.

Despite the difficulties in developing the game, *Burnout Paradise* blended core *Burnout* features with the open-world concept very well – the new Showtime mode was a reimagined version of Crash mode, focused on gaining distance by keeping your car bouncing, while Stunt Runs let you show off your driving skills by performing tricks for points. Cars now had different boost

» The cars weren't licensed, but they evoked real-world designs.



» [PC] There are lots of cool things to find while cruising through Paradise City, including Super Jumps.



# CRASH AND BURN

The strange departure that was Burnout's last original game to date



Although *Burnout Paradise* was the last full-fledged *Burnout* game, a download-only game by the name of *Burnout Crash* was released for PS3 and Xbox 360 a few years after that. The game took the Crash mode of past games and reframed it as a top-down affair, with the aim still being to score points by causing as much damage as possible. The game was a slight package, offering just seven cars and six intersections, although the online

Autolog challenges did add some lasting value. Unfortunately, the servers for the game are now offline, diminishing the game's appeal. Reviews of *Burnout Crash* were mildly positive upon its release in September 2011, with critics typically finding that it was fun, but merely served to whet the appetite for a more substantial *Burnout* experience. *Play* offered one of the most positive reviews, scoring it 79%, while a 6/10 review in *games™* suggested

that "gamers looking for a test of skill would be better off playing *Angry Birds*". *Official PlayStation Magazine* split the difference and scored it 7/10, with the reviewer feeling that the game "strikes just the right balance between addictive and repetitive". *Burnout Crash* also received a release on iOS devices in April 2012, and that version found a better critical reception, however the game was pulled from sale in 2015.



» [PS4] Bikes were added to *Burnout Paradise* as part of the game's extensive campaign of updates and DLC.

» [PS4] *Burnout Paradise Remastered* shot to the top of the charts when it was released last year.

types, with Speed being similar to the early games, Aggression being similar to *Burnout 3* onwards and a Stunt type that encouraged performing tricks. Open-world elements were smartly worked into the game design – damage to your car persists between events and you need to seek repair shops to fix it (this is less onerous than it might sound, as it's an instant process) while driving through gas station forecourts would award you with a full boost bar.

In January 2008, *Burnout Paradise* arrived for Xbox 360, PS3 and PC. *Edge* described the game as a "build-your-own *Burnout*" where "if you don't like what lurks around one particular corner, you just drive along to the next and score some leisurely points en route." Praising it as Criterion's "most courageous game to date", the magazine claimed that it was "hard not to see it as the birth of a new era" and awarded it 9/10. Other critics broadly agreed – the game scored 9/10 in *X360 Magazine*, 90% in *GamesMaster* and 9/10 in *Official PlayStation Magazine*. Not everyone was quite so impressed though, with *games™* scoring it 7/10 and *Play* awarding it 74%, criticising it for being too repetitive.

But that wasn't the end of the *Burnout Paradise* story, as the game received a considerable amount of DLC. "We only did that because the whole

'second sale' thing was huge in the US at the time. We decided to create a reason for people not to trade our game," explains Alex. "We also knew that EA sales people sold our game for a week or two, then went onto *The Sims*, then *Tiger Woods* golf etc. Few of them really understood our work or believed in *Burnout* as a franchise. We wanted to create a reason for the game to continue to sell so all the updates fell out of that." Features added included new game modes, day/night cycles, motorbikes, and even a whole new stunt-friendly area called Big Surf Island. "We did a lot of groundbreaking stuff and everyone stepped up, artists, programmers, the ops people, everyone. We broke new ground with the format holders as no one had ever done so much DLC at the time." This ultimately led to the release of *Burnout Paradise: The Ultimate Box*, a package that collected the game and its expansions. In fact, there was more *Burnout Paradise* content than players ever saw. "We also did a lot of stuff that never came out – we had planes,

helicopters, multiple players [in] a car and bike, we had lunar challenges on the Moon... again all groundbreaking stuff," Alex reveals. "I don't think you'll ever see anything like it ever again really."

Perhaps fittingly, it seems that we're unlikely to see *Burnout* again. Criterion moved on to revitalise the *Need For Speed* series, bringing much of the *Burnout* experience to that series. And apart from the downloadable game *Burnout Crash*, there hasn't been a new game in the series for over a decade. Though *Burnout Paradise Remastered* went to the top of the charts when it was released in 2018, there's no sign of a new game in the series, so *Burnout* fans wanting their fix on current systems have limited options – though one of them is *Dangerous Driving*, the spiritual successor developed by Alex's current company Three Fields Entertainment. But if you're reading this, then you likely have access to the hardware needed to run the thrilling originals, and they hold up beautifully today – so go pick one up and have a smashing good time. ✪

## "WE DID A LOT OF GROUNDBREAKING STUFF"

Alex Ward

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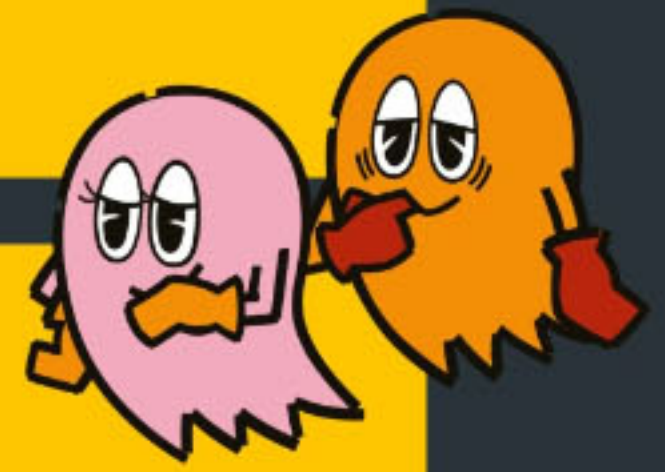
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# THE HISTORY OF **Yie Ar KUNG-FU**

In fighting game history one title transcends them all. Konami's Yie Ar Kung-Fu coin-op created the template that every fighter followed. It also spawned its own series, including a distinct home version, countless conversions and a very silly sequel

Words by Martyn Carroll







» [Arcade] The Feedle fight provides a brief interlude before the taxing Masterhand tournament begins.

**Y**ie Ar Kung-Fu was not the first one-on-one fighting game and we're not going to tell you what was. That's because we don't actually know. Many cite Data East's *Karate Champ* (1984) as the granddaddy of the genre, but there are multiple earlier contenders. So 1985's *Yie Ar Kung-Fu* wasn't the first, but it's the earliest example of what we'd now call a traditional fighter.

Unlike *Karate Champ*, where you fought a 'clone' with the same moveset, in *Yie Ar Kung-Fu* you faced a roster of increasingly challenging enemies, each with their own fighting style. There was also a backstory which involved our hero Oolong battling 11 deadly opponents to become the Kung-Fu Grand Master, in honour of his father who had died trying to achieve the same feat.

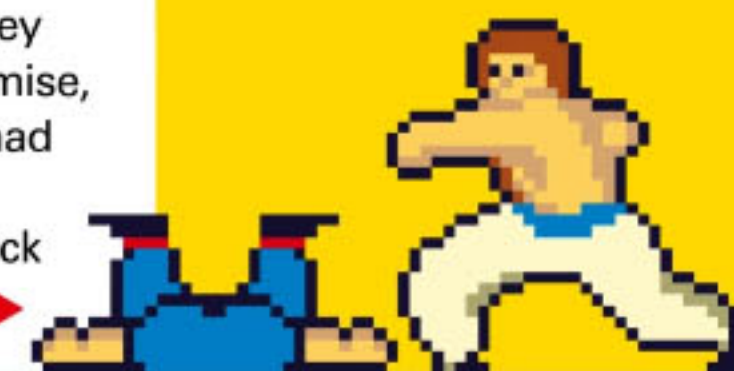


to say, *Yie Ar Kung-Fu* was a hugely popular and highly influential release.

Konami must have guessed it had a winning formula as a version for the MSX computer range was developed in tandem with the arcade game. The main character was named Lee here, in the true spirit of Bruceploitation, but that wasn't the only difference. Rather than try and emulate the coin-op, the MSX game was designed with the hardware in mind, and specifically the requirement to squeeze everything onto a 16K cart. So there was only one backdrop (a dojo interior), and just five enemies (members of the feared Chop Suey gang, so the story went). The biggest compromise, however, was the controls. The arcade game had separate punch and kick buttons, whereas the MSX had to map all of the moves onto a joystick with a single fire button.



» [Arcade] Enemies, such as Star, use projectile weapons. Jump or you'll be dead at ten paces



## GAMES OF DEATH

More titles based on the life and works of Bruce Lee



### BRUCE LEE

DATASOFT, 1984

■ This action platformer was developed for the Atari computer range before being ported to most 8-bit systems of the day. It's an absolute classic that introduced the Hong Kong-American martial arts master to an audience of gamers that were too young to watch *Enter The Dragon*.



### BRUCE LEE LIVES

SOFTWARE TOOLWORKS, 1989

■ This one-on-one fighter for the PC was closer to *Karate Champ* and *The Way Of The Exploding Fist* than *Yie Ar Kung-Fu*. It was more strategic and less manic, and the AI 'learned' your playstyle so you couldn't spam the same old moves. Good, but not great.



### DRAGON: THE BRUCE LEE STORY

VIRGIN, 1994

■ Based on the 1993 biopic, this was another one-on-one fighter released for the Jaguar, Mega Drive and SNES. Bizarrely, it harked back to the original *Yie Ar Kung-Fu* in that you could only play as one character (Bruce in this case), even in versus battles.



### BRUCE LEE: RETURN OF THE LEGEND

VICARIOUS VISIONS, 2003

■ Here's another one of those underrated gems that graced the GBA. Juggling platforming, fighting and stealth, it was greater than the sum of its parts. It was preferable to the awful Bruce Lee game Universal dropped on the Xbox.



### BRUCE LEE II

BRUNO R MARCOS, 2013

■ Three decades after Datasoft's Atari original, Bruno Marcos devised an unofficial follow-up for the PC that mimicked the gameplay and look of the original. Bruce even acquired some new skills, such as swimming. Part-sequel, part-tribute, this effort was wholly excellent.

# CONVERSION CAPERS

We compare Imagine's conversions of Yie Ar Kung-Fu II



## COMMODORE 64

■ This is the best conversion, and in our opinion tops the MSX version thanks to the speed of the game and the in-game music from Martin Galway. All of the stages and fighters are included, and there's a neat high-score entry sequence.



## ZX SPECTRUM

■ The Spectrum version of the original game was great, but this is a mess. While large, the sprites are poorly animated (and colourless). The sound is awful, too. You'd need the resolve of a grand master to persevere with this effort.



## AMSTRAD CPC

■ This looks better than the Spectrum version, bar the chunky sprites, but plays equally slowly and poorly. Due to memory issues there are only two backdrops, with the cave and pier missing. Stick to the superior CPC version of the original game.



## THOMSON MO5

■ We'd like to invite a guest to adjudge this one: the game's coder, James Higgins. "I was pleased with it at the time, but it looks really awful now and the framerate is pretty appalling. It was not an especially memorable project to work on."



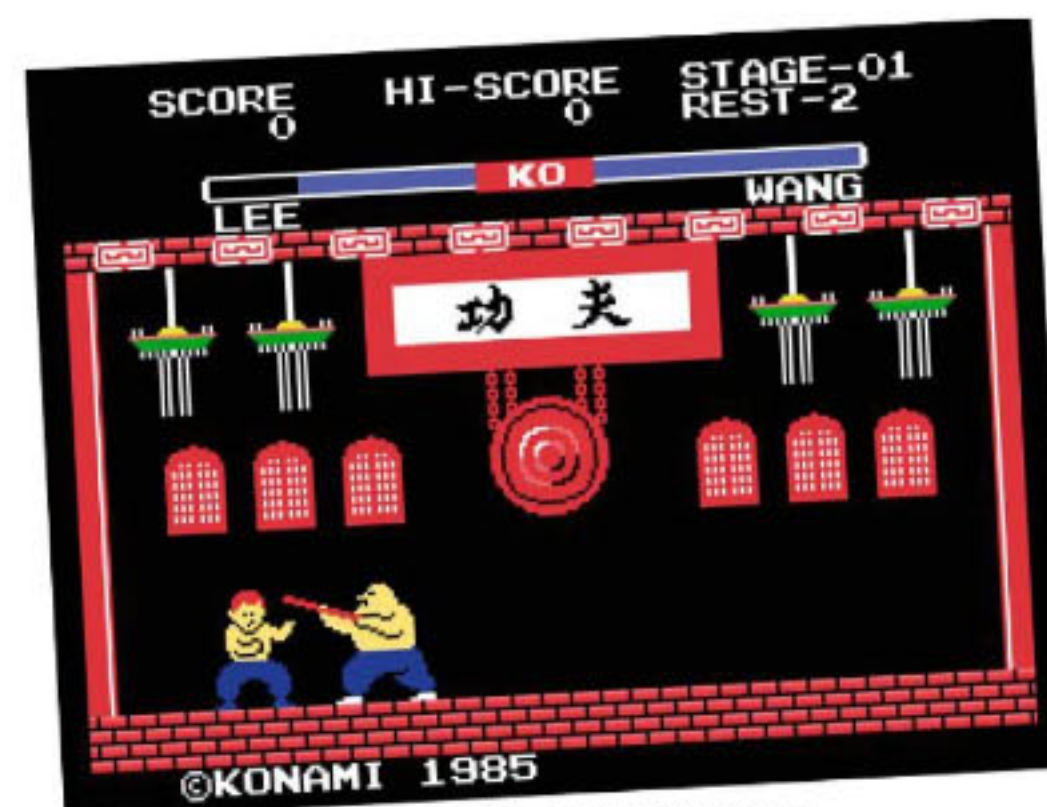
## BBC MICRO

■ Acorn expert Peter Johnson returned for the sequel and turned out another solid, highly colourful conversion. Unlike the sluggish Z80 versions the speed here is excellent, and the only noticeable thing missing is the two-player versus mode.



## ACORN ELECTRON

■ This is an admirable copy of the Beeb release. The number of on-screen colours has been reduced, and the sound is far more basic, but it plays just as well as its big brother version. This is one fighting game that Electron owners can be proud of.



» [MSX] Konami's MSX version of Yie Ar Kung-Fu was was popular with critics. What MSX? awarded it 9/10.

► Regardless, the MSX version was well received when it was released in February 1985, mere weeks after the coin-op's debut in arcades. "The graphics are brilliant and the jolly Chinese tunes are excellent," commented *What MSX?* magazine in its 9/10 review. "This is programming at its best. If you start playing it you won't be able to leave it alone." A few months later the game was successfully ported to the NES. Nothing significant was changed or added, but the presence of two fire buttons for kick and punch made it the preferred version.

**K**onami saw the potential of releasing home versions of its arcade properties, but outside of its homeland there were so many different systems to consider.

It looked to established European publishers and chose to partner with Ocean, signing an eight-game deal in mid-1985 that included *Hyper Sports*, *Green Beret*, *Mikie* and the arcade version of *Yie Ar Kung-Fu*. Konami was concerned that Ocean's name might overshadow its own, so Ocean agreed to publish the games on its Imagine label.

This was a coup for Ocean, although the job of converting eight games to multiple formats was too big for the in-house team. For *Yie Ar Kung-Fu* it farmed out conversion duties to Brian Beuken who operated as Timeless Software. "The biggest issue was finding coders to do it," says Brian, who had never played the coin-op when he took on the job. "I was operating from a small office near my home in Scotland but didn't employ any staff, and needed to find three trustworthy people to do each conversion – Spectrum, Amstrad and Commodore. I got lucky though and found them."

The conversion wasn't straightforward, however, largely due to the inexperience of the young team. "All three coders faced different issues," he says. "The Amstrad's issue was memory. Keith Wilson, who was only 14 at the time, was a prodigy and a really great coder, working out all the AI really quickly, but he had no idea how to fit all the code and graphics data into the limited memory. As I was creating the graphics for all versions, by basically pausing a video tape of an arcade playthrough, it dawned on me that the sprites didn't need too many colours

» [NES] You have both kick and punch buttons in the NES version. Very handy.



» Brian Beuken has been writing games for 35 years. He's just released a game coding book for beginners: see [facebook.com/fundamentalsbook](https://facebook.com/fundamentalsbook).

## “It was all about timing, and knowing when to punch or duck”

Peter Johnson

and I could free up some spare bits.” This allowed Brian to create a compressed sprite routine that made more efficient use of the available space. “The Spectrum’s memory issue wasn’t as bad, but its biggest problem was speed. The coder just couldn’t get it to update fast enough, but I did come up with an overlapping sprite system which increased the speed quite a bit. Ultimately, though, both machines lacked the memory to get everything in so we got Ocean to agree to drop some features or make them additional loads.”

The C64 version caused even more of a headache. “Although the coder I hired understood the principles of sprite multiplexing he couldn’t get it to work and the project went into a tailspin. We only had eight weeks or so to do the conversion and he’d taken four or five weeks by that point, so Ocean stepped in and took the C64 version in-house.” Dave Collier was roped in and he started from scratch. “Dave was a total legend at Ocean and was given free rein to do everything his way,” says Brian.

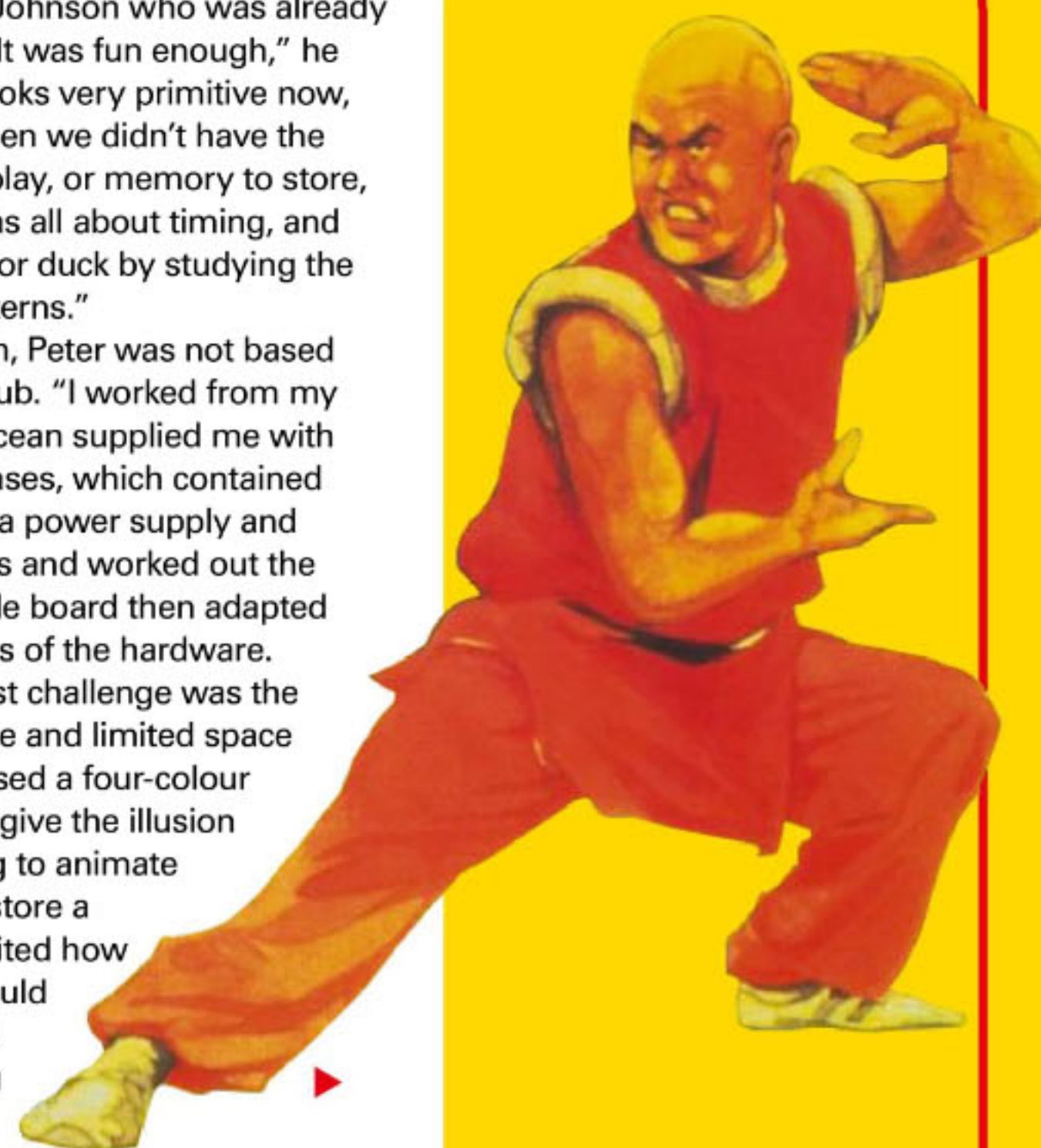
can also earmarked versions for the Commodore 16, BBC Micro and Electron. For the Acorn versions they enlisted Peter Johnson who was already familiar with the game. “It was fun enough,” he says of the coin-op. “It looks very primitive now, but this was at a time when we didn’t have the processing power to display, or memory to store, large fighter sprites. It was all about timing, and knowing when to punch or duck by studying the enemies’ movement patterns.”

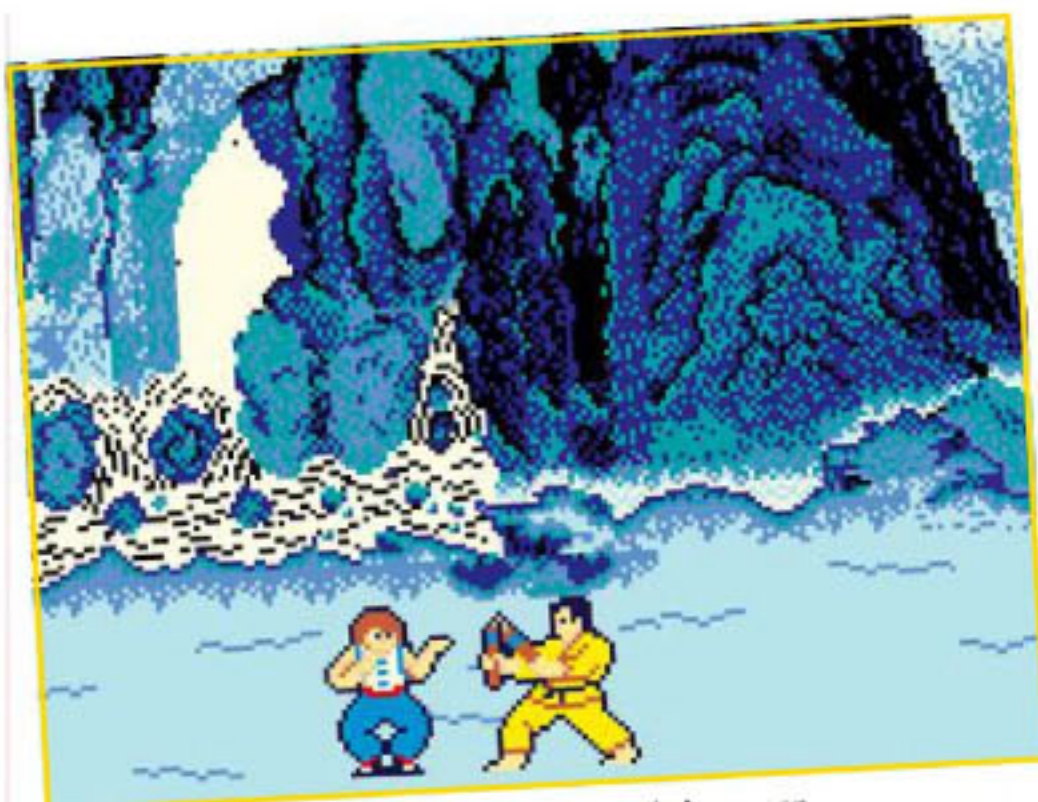
Like Brian and his team, Peter was not based in Ocean’s Manchester hub. “I worked from my home in Newcastle so Ocean supplied me with one of their special suitcases, which contained a real arcade board with a power supply and joystick. I drew the sprites and worked out the gameplay from the arcade board then adapted it to best fit the limitations of the hardware. With the Beeb the trickiest challenge was the very limited colour palette and limited space for animation frames. I used a four-colour screen with interrupts to give the illusion of more colours. Needing to animate a range of enemies and store a complex background limited how much animation there could be. Sometimes the most interesting part of coding

» [BBC Micro] The Beeb version takes some small elements from the MSX game, such as our hero cracking a smile when he wins.



» [C64] Po-Chin tries to toast you with his fiery breath on the Commodore 64.



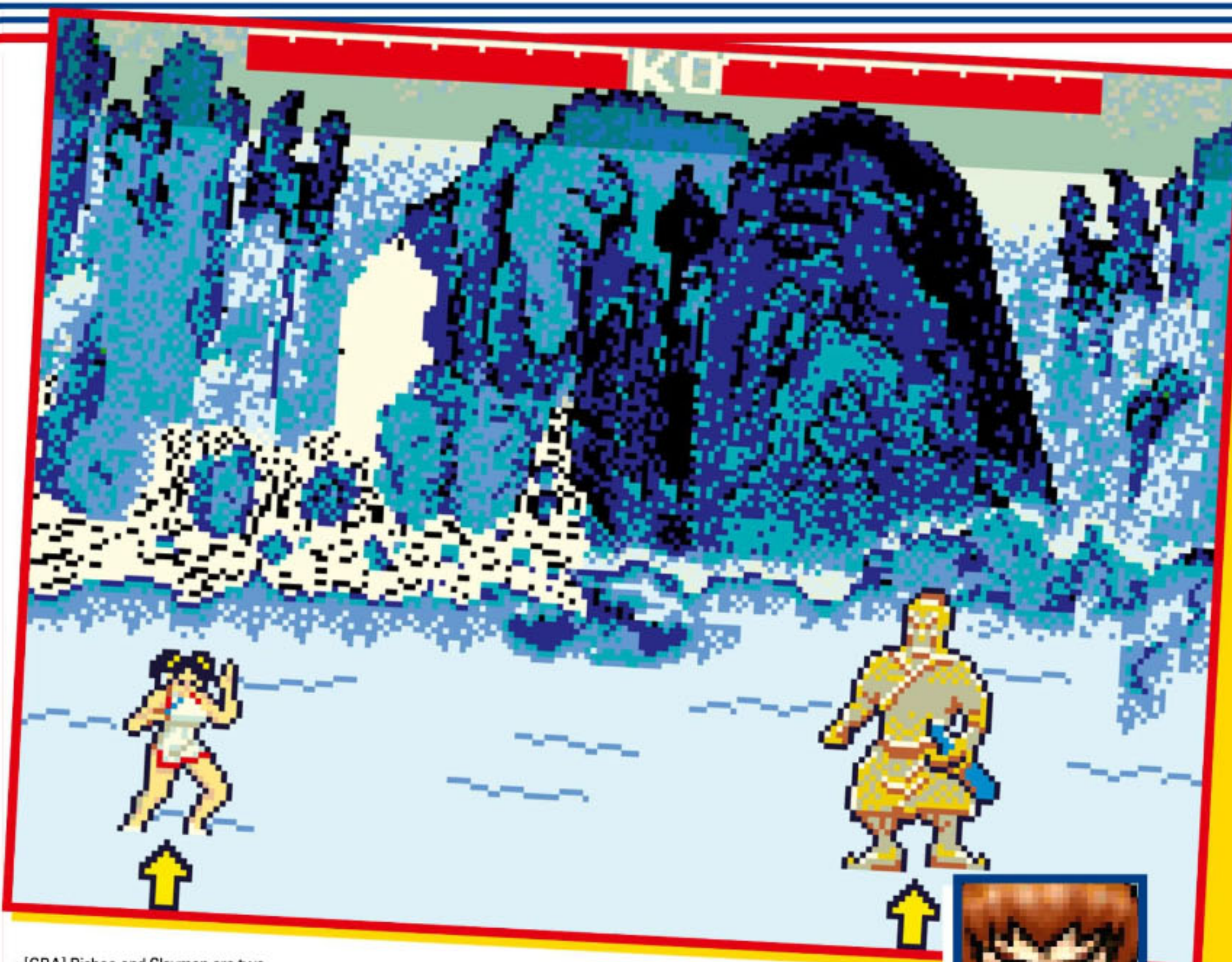


» [Arcade] Many characters were named after their weapon preference, such as Mr Nuncha here.

► a game is deciding how to balance the available resources." Once the Beeb version was complete he ported the game over to the Electron. "That probably took a few weeks. I could not use the colour interrupt technique on the Electron as the hardware was more limited."

**M**emory was an issue that affected all of Ocean's conversions, so Brian jumped at the chance when he was asked to revisit the game for the new 128K Spectrum. "Even though we screwed up the C64 version, Ocean's Colin Stokes was impressed with me when he visited to review progress," he recalls. "After the original game launched and everything was selling well he suggested I come down to Manchester and do a Spectrum 128 version which was due to be packaged with the new machine at launch. The intention was to do a quick port, but as I'd only written the sprite system for the 48K version I needed to get my head round the code. Also, after reviewing the 128K's hardware I realised it was possible to do a double-screen paging system, so I suggested I start it from scratch. This didn't go down too well, but I must have made a good argument as they let me get on with it. I wrote the whole game again from the ground up, using the screen swap for faster and smoother updates, and the extra memory let me get everything in one load."

Brian was also able to redo the background graphics and add in the Feedle and Chain fights that were cut from the 48K version. Legendary pixel artist F David Thorpe also contributed a smart new loading screen based on the cover art.



» [GBA] Bishoo and Clayman are two new fighters that are only found in the GBA version of Yie Ar Kung-Fu.



» Peter Johnson still codes, creating iOS apps such as MailShot Pro and ShotList.

Before Ocean released any of its home conversions, Konami had already rushed out a second game. *Yie Ar Kung-Fu II* arrived at the tail end of 1985 and was developed for the MSX rather than the arcade. So Oolong was out and Lee was in, or at least his son Lee-Young was. The game was set 20 years after the original, but the challenge was the same – floor a bunch of larger-than-life foes. However the sprites and backgrounds were improved, thanks to the use of a 32K cart, and there were a couple of noteworthy additions. The first was that before you fought each enemy, you had to progress through three screens of flying ninja kids – Konami product manager Luther De Gale preferred to use much more crass and offensive language to refer to them at the time, but we won't repeat it here. To be fair, this was an absurd game. For instance your third opponent, Po Chin, tried to fart you to death.

The other addition was something that was absent from both the arcade and MSX versions – a



## THE HATEFUL EIGHT The deadliest opponent from across the series

### CHAIN

GAME YIE AR KUNG-FU  
FORMAT ARCADE

■ The sixth opponent, and the first in the Masterhand tournament, is your first real challenge. He swings his deadly metal chain around his head.

**HOW TO BEAT THEM:** You can't duck to avoid his chain as he swings it low, too. Keep jumping until you can get in close, then attack in quick flurries.



### TONFUN

GAME YIE AR KUNG-FU  
FORMAT ARCADE

■ The penultimate challenger is possibly the toughest in the whole game. He moves really quickly and his stick attack is lethal if you're cornered.

**HOW TO BEAT THEM:** Don't get cornered! Stay in the air, and when you spy your chance, sneak in a leg sweep or ankle blow.



### BLUES

GAME YIE AR KUNG-FU  
FORMAT ARCADE

■ Oolong's doppelganger shares most of your moves, including the long jump. While unpredictable, he does favour quick cyclone kicks.

**HOW TO BEAT THEM:** As with Tonfun, you need to keep jumping and bide your time for an opening. Land a quick blow then retreat; rinse, repeat.



### LANG

GAME YIE AR KUNG-FU  
FORMAT MSX

■ Lang is the equivalent of the arcade version's Star, only she's more aggressive and challenging. She throws stars at three different heights.

**HOW TO BEAT THEM:** Jump or duck to avoid her throwing stars, then attack when close. She will kick, so jump away before she can connect.



player-versus-player mode. P1 used Lee-Young while P2 could choose from three opponents – Yen-Pei, Lan-Fang or Po-Chin. While poorly balanced, this mode was a fun addition, and in allowing players to select Lan-Fang it became the first fighter to feature a playable female character. The sequel was well received at the time. *MSX Computing* magazine awarded it full marks for graphics, sound and value, commenting: “Bouncing [dwarfs], masked men and deadly women wielding fans – it’s all happening. Konami makes great arcade games and this program is faultless. What more can we say?”

Having scored a sizable hit with the original, Ocean grabbed the rights to the sequel for its Imagine label. “The sequel was quite similar to the first game, with updated graphics and enemies,” says Peter Johnson, who returned to handle the BBC Micro and Electron versions. “I was able to reuse a lot from the first conversion. There were some slightly different challenges in fitting things into memory, but it certainly wasn’t a case of starting from scratch. For reference Ocean supplied me with a Sony HitBit MSX computer. I probably still have it in the loft somewhere, along with the original cartridge.”

**W** one of the conversions were knockouts, but the C64 version was the most polished thanks to the soundtrack by Martin Galway and the sprite work by Andrew Sleigh. “It was my first completed C64 game for Ocean, having joined earlier in the year,” says Andrew, who worked alongside coder Allan Short. “I had initially started to work on *Short Circuit* but moved to this game having previously only crated graphics for the Spectrum. I had to learn a whole new set of techniques in a short time but I was pleased with the results.” He also reveals how Po-Chin’s gas attack was purged from the conversions. “I remember that in the original version Po-Chin attacked with ‘gas’ clouds from his rear, but it was deemed that he should be flipped around so that fire came out of his mouth!”

Despite being the official sequel, Ocean’s conversion attracted some unexpected competition from a brazen challenger. Rival Brit publisher The Edge licensed Konami’s arcade

beat-’em-up *Shao-Lin’s Road* and advertised it as “The smash hit follow-up to *Yie Ar Kung-Fu*”. Now *Shao-Lin’s Road* technically was a follow-up, in that it came after *Yie Ar Kung-Fu* in the arcades, but The Edge was clearly implying that it was a proper sequel. It even changed the name of the main character to Lee! Sensing the confusion, *Crash* magazine reviewed both Spectrum conversions side by side in its February 1987 issue and settled the matter, critically at least, awarding *Shao-Lin’s Road* 67% and *Yie Ar Kung-Fu II* 48%. Impostor Lee won this particular battle.

Oolong, Lee or Lee-Young never appeared in another fighting game. In 1993, at the height of *Street Fighter II* mania, Konami developed a fighter with the project name *Yie Ar Kung-Fu 2* but it was released as *Martial Champion* with no connection to the previous games – although the fighter Jin clearly resembled an older Lee.

Instead, the series has been kept alive through a series of ports produced for retro compilations. The original coin-op has been included on *Konami Arcade Classics*, *Konami Collector’s Series*, *Oretachi Gesen Zoku*, *Konami Arcade Classics* and Microsoft’s *Game Room*. Both MSX games were included on the *Konami Antiques MSX Collection* while the NES version appeared as part of the *Konami GB Collection*, and was included in the Japanese line-up of the NES Mini system. The coin-op was also resurrected as an Xbox Live Arcade title in 2007, sporting enhanced graphics and perfunctory online features.

Of all these ports the most interesting by far is the GBA one. This otherwise faithful port can be extended by entering the Konami code at the title screen. Then, when you defeat Blues, you’re whisked off to a bamboo forest where you face two new fighters – knife-throwing temptress Bishoo and lofty warrior Clayman. Even better, the game supports versus play via the link cable and players can select any of the game’s 14 fighters. For years, fans wondered whether it was possible to hack the game so that the enemy fighters were playable, and then in 2002 Konami released a port that finally made it possible. And no one can criticise Konami for incorporating a fighting game staple, as with *Yie Ar Kung-Fu* it laid the cornerstone on which the genre was built. ★



» [GBA] You can select any fighter from the 14-strong roster when you play in versus mode.



» [GBA] The bonus fights against Bishoo and Clayman take place in front of an exclusive new backdrop.

“There were some slightly different challenges in fitting things into memory”

Peter Johnson

**PO-CHIN**

GAME YIE AR KUNG-FU II  
FORMAT MSX

■ This heavyweight opponent, the third you face, unleashes a foul gas attack that will temporarily stun you.

**HOW TO BEAT THEM:** Jump or kick his emissions, then wear him down with a series of low ankle blows. Kick him in the back when he turns.



**MEI-LING**

GAME YIE AR KUNG-FU II  
FORMAT MSX

■ Another female fighter who is far more deadlier than she looks. She throws knives, which are bad, and her rapid high kicks are even worse.

**HOW TO BEAT THEM:** Jump to avoid her knives and try and connect with flying kicks. She’s fast so don’t go toe-to-toe. Keep on the move instead.



**LI-JEN**

GAME YIE AR KUNG-FU II  
FORMAT MSX

■ The sequel’s final boss is a crafty character as he summons lightning from the sky that stuns you and is able to teleport around the screen.

**HOW TO BEAT THEM:** Don’t jump, as you’ll get zapped. Move towards him, dodging the lightning, and hit low. Skill helps, as does luck.



**CLAYMAN**

GAME YIE AR KUNG-FU  
FORMAT GBA

■ This bonus boss, exclusive to the GBA version, is a real challenge. He tries to shoulder-barge you and swipe you with his sword.

**HOW TO BEAT THEM:** He’s not susceptible to much except low punches. The dude crumbles into a pile of dust when you defeat him!



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# LAYSTATION



ULTIMATE  
GUIDE:

# SONIC 2008







» [ZX Spectrum] If Eric gets penalised with too many lines, he'll get expelled and it's game over.

35 years ago, publisher Microsphere took us back to the classroom with its tale of errant schoolboy Eric and his damning school report. Pick up your catapult – it's time to... hit some shields?

Words by Graeme Mason

**E**ric has been a naughty boy. Unauthorised absences, scribbling on blackboards and the use of an offensive weapon have all led to an appalling term report. Should Eric knuckle down and study hard so that he can improve his grades? Or should he try and make sure that the derogatory report, locked away inside the school safe, never reaches his parents? We think we know the answer.

Set up not long after Sinclair announced the ZX Spectrum, north London software house Microsphere quickly established itself as a home for quality games on the popular computer. Run by the husband and wife team of Dave and Helen Reidy, the pair began by publishing utilities before realising the Spectrum's potential as a games machine. After *The Train Game*, Microsphere's breakthrough hit came with the motorcycle smash *Wheelie* in 1983. When thoughts turned to their next effort, the Reidys drew on both their experiences as school teachers, plotting and planning a game based around the so-called 'happiest days of your life'. With Dave writing the code down on paper, Helen typing it in and their colleague Keith Warrington providing the graphics, there was a cosy feel to development at Microsphere. But the result was a classic 8-bit title that broke the mould with its sandbox-style game design before that term even existed. ▶

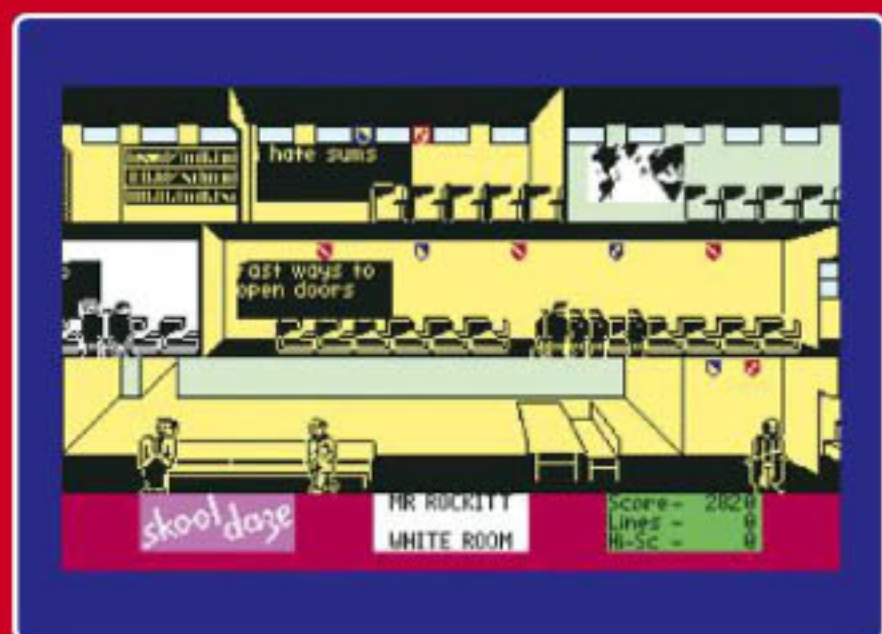
# CONVERSION CAPERS

Which version earns extra credit, and which gets detention?



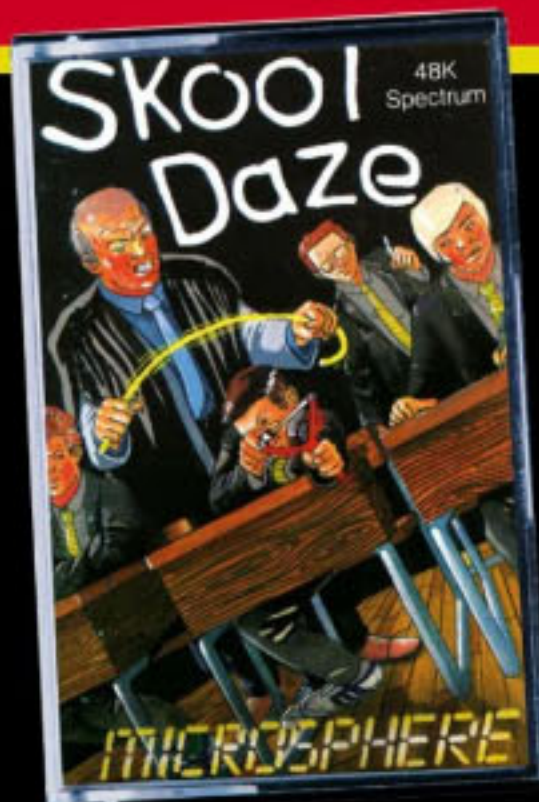
## ZX SPECTRUM

■ The original version of *Skool Daze* on the Spectrum is, quite rightfully, the best remembered one. Coded by Dave Reidy, with help from his wife Helen, the game's charming graphics, full of personality and quirkiness, were designed by their colleague Keith Warrington. It's not perfect – the push scroll can be annoying at times, and the sound is sparse at best – but there's no doubting that *Skool Daze's* iconic gameplay entirely justifies its position as one of the finest games on the Sinclair computer.



## COMMODORE 64

■ With the Spectrum version of *Skool Daze* proving a smash hit, Microsphere began working on a port to the Commodore 64. Released in the following year, it retains all the elements that made the game such a hit, only with improved sound. While the C64 *Skool Daze's* similar graphics didn't endear it to some critics, the core sandbox design worked just as well despite a few minor tweaks. Sadly, sales were not as outstanding as on the Spectrum, and it became Microsphere's lone Commodore 64 game.



» Luckily, copies of *Skool Daze* aren't expensive so you can experience this great game quite easily.



» [C64] Playtime is predictably frenetic, and keep an eye out for Angelface!

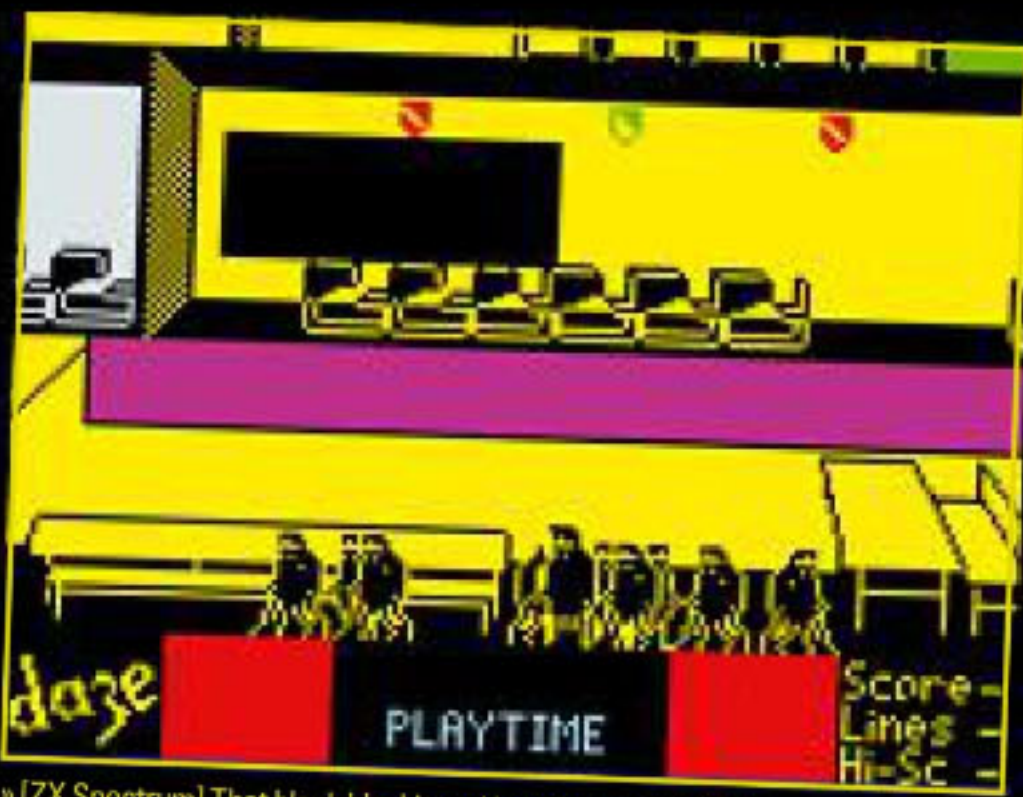
► In a move of genius, *Skool Daze* begins with each member of the cast strolling into the centre of the screen with an option to rename them in turn. Einstein, the bespectacled child know-it-all can become the school swot from your own class. Pudgy bully Angelface is transformed into your personal nemesis from the playground, alongside Mr Wacker the patriarchal headteacher, and of course you can cast yourself as the star of the story. The game then commences with

playtime, and our hero is surrounded by the cast of his school, friends and enemies everywhere. During this break, the teachers stalk the building, making sure Eric and his cohorts maintain some semblance of good behaviour, and they're named in a quaintly amusing *Bash Street Kids* style. There's Mr Rockitt, the nerdy science teacher; Mr Creak, the history teacher who looks like he's teaching most of history from his own first-hand experiences; and Mr Withit, the younger and friendlier geography teacher who addresses his pupils as 'chaps' and strolls around with his hands in his pockets. Finally, straight out of the pages of *The Demon Headmaster* is Mr Wacker the cloaked

# PIXEL PERFECT

Welcome to the school of hard knocks





» [ZX Spectrum] That blank blackboard is absolutely perfect for writing a rude word on. You have to reach it first, though.

dark lord of the establishment, gliding menacingly throughout the classrooms, brandishing his cane and dispensing lines to any schoolboy foolish enough to misbehave in his presence.

These lines, given in random lots of hundred, are the unwanted currency of *Skool Daze*: accrue too many and Eric is expelled. Lines can be given for a variety of reasons, and not just the obvious ones, such as punching a fellow student or firing your catapult at a teacher. Sitting on the floor, being in the wrong classroom and wandering into the staff room will all net you a punishment, and sometimes it's not even your fault. In the time-honoured tradition, *Skool Daze* enables its youthful inhabitants to be naughty and then get the rap pinned on another pupil. Alas, this works both ways as Eric is often collared for the antics of Boy Wander (the tearaway) or school bully, Angelface.

Gaining lines is an inevitability as Eric's days at school pass by. Determined to extract the report from the headmaster's safe, each of the school's shields must be struck in order to make them flash. Only when all of them are flashing will the teachers become disorientated enough to reveal their secret combination letter, each one of which is required to prise open that safe. That's not all however, as Eric must then cover his tracks and 'unflash' the shields by hitting them once more. Only when this is done can our hero breathe easily, until the next term that is.

As with another 8-bit sandbox classic, Ocean's *The Great Escape*, *Skool Daze* has a set timetable and routine to each cycle. Beginning with playtime, Eric's day proceeds with a geography lesson, revision in the library, science, dinner time and so on. Failure to adhere to this schedule results in the relevant teacher chasing after the young man, itching to give out a stack of hateful lines. And to make things even trickier for Eric, there are several random events that occur throughout the game, presumably inspired by Helen and Dave's real-life teaching experiences. For example, in one event, boffin Einstein has deduced your plan and is off to tell the head; the only way to prevent the resulting 2,000 lines should he reach Mr Wacker is to make sure the swot doesn't make it to his study in one piece. Or Boy Wander is at it again, labelling an incriminating weapon (a pea-shooter) with Eric's name and leaving it on the fire escape. Stop the headteacher before the tearaway can retrieve



» [PC] The remake features new graphics, but retains the feel of the original.

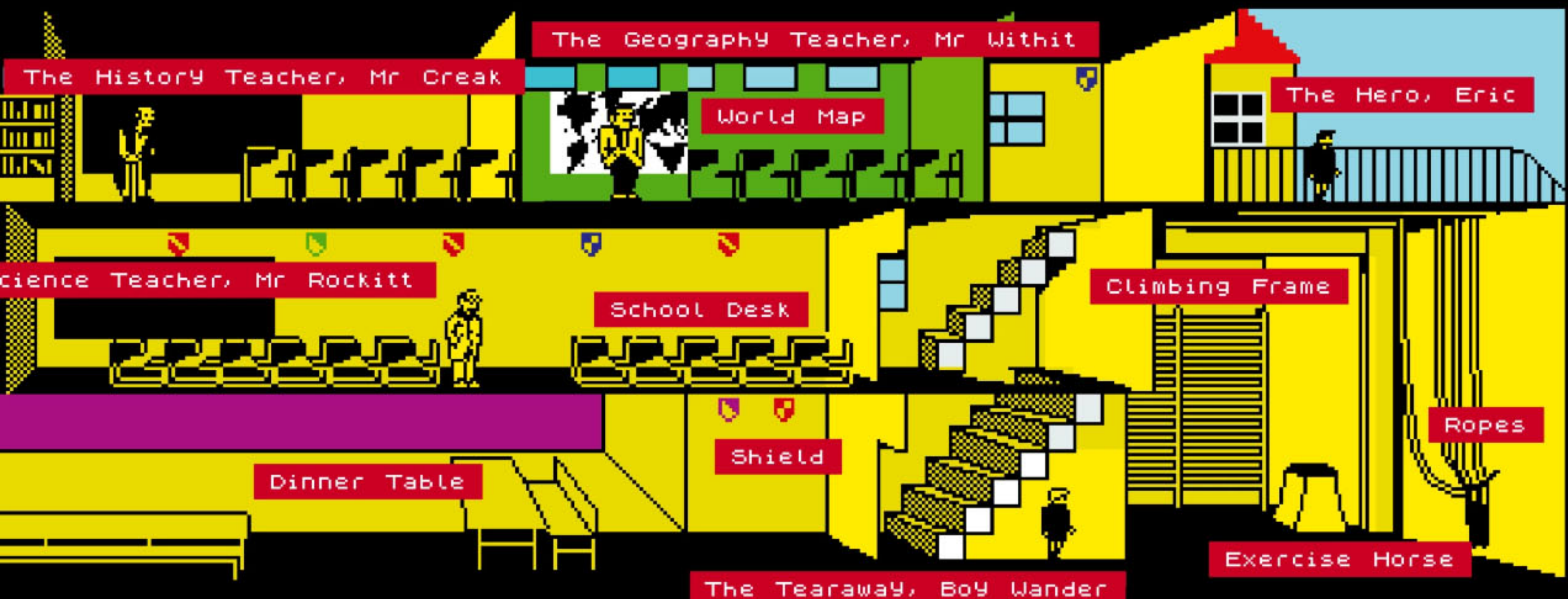
## BACK TO SKOOL

**Skool Daze Reskooled brings a flavour of old school cool**

Faced with recreating a revered classic for the modern age, Alternative Software has combined the timeless charm of the original with a contemporary sheen in *Skool Daze Reskooled*. Many of the original's characters are present and correct: there's the blonde Boy Wander, a creaking Mr Creak, bespectacled Mr Rockitt and, of course, Eric himself. And while the sound effects have been jazzed up, the famous two-tone siren that indicates lines are being given out remains nostalgically in place. Eric's first task is still to obtain his report by activating all the school's shields and he now has a new range of antics to get involved in. For example, waiting by the school gates is his scooter, upon which he can perform stunts. Also included is a revamp of sequel *Back To Skool* (featuring the neighbouring girls' school), and another new adventure, *Nu Skool*, ensures that *Skool Daze Reskooled* represents excellent value. It's available on PC, iOS and Android.

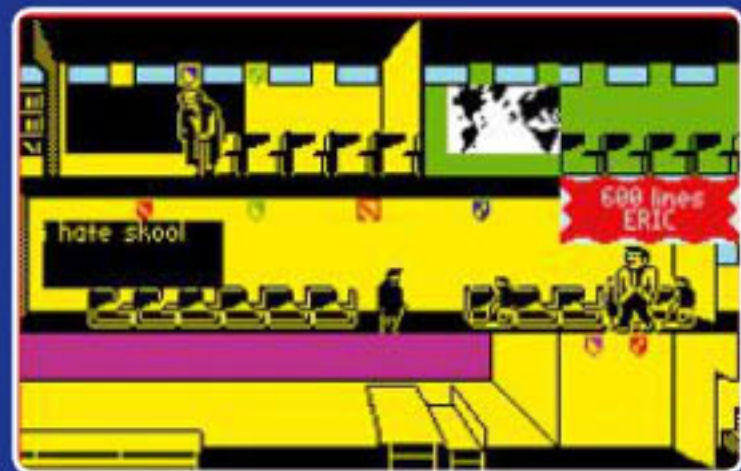
"To have fun you didn't need to beat the game, you could just live and play around within its own world"

Roger Hulley



# SWOTTING UP

Eight tips on surviving Skool Daze



## HITTING THE SHIELDS PART 1

■ The shields on the top floor can easily be reached by jumping at them, whereas the ones on the middle floor are trickier. These require Eric to knock a kid over and then jump on them.



## HITTING THE SHIELDS PART 2

■ While some of the shields on the ground floor can be hit from the stairs, most of them need Eric to catapult a teacher once to knock him over, followed by a ricochet off his head and onto the shield above.



## PLAYING THE BLAME GAME

■ There's a lot of fun to be had by timing Eric's misdemeanours so that Boy Wander, Angelface or Einstein are reprimanded instead of our hero. It's straightforward to achieve, as the teachers dole out lines to whoever is nearest at the time.



## OBTAINING THE CODE PART 1

■ When all the shields have been activated, it's time to get the combination letters from the teachers. The headmaster must be done first, followed by the others. Mr Creak's letter might prove problematic, but we're here to help...

## OBTAINING THE CODE PART 2

■ If you've been paying attention in class, you'd have seen the answer to Mr Creak's question, 'Which battle occurred in the year I was born?' Write the answer and he'll reveal the letter.



## BEWARE THE GEOGRAPHY ROOM

■ There's a bug in the map room. Because there aren't enough seats, Eric will keep getting lines as he's knocked off his chair. Fortunately there's a workaround: follow Mr Withit and stand behind him. He fails to notice, contradicting his name.



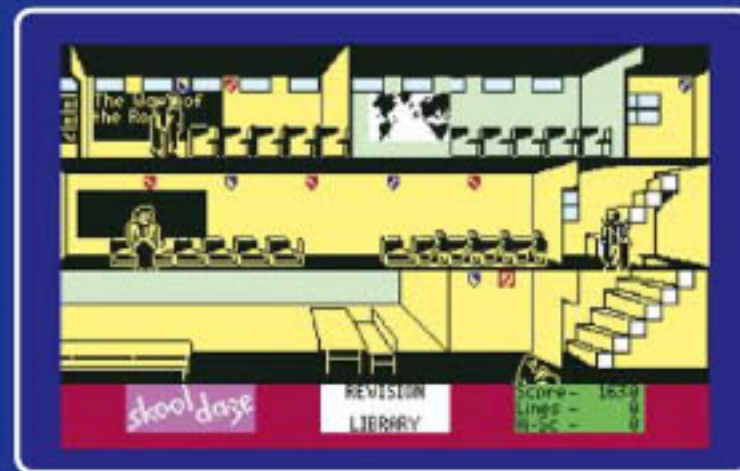
## SWOT ATTACK

■ Occasionally during playtime, one of the little schoolboys will inform Eric that the swot is on his way to the headmaster to grass him up. Intercept and detain Einstein by any means at your disposal. Basically, punch his lights out until the bell goes.



## SHIELD REVISION

■ Given that Eric gets lines if he's found absent from class, there are limited opportunities to explore the school and prime the shields. Revision time is one such time, as long as the diminutive protagonist doesn't wander into a class he shouldn't be in, or the staff room.



» [C64] Eric contemplates his latest escapades away from the teachers on the school's fire escape.

"It was such an original idea at the time"

Roger Hulley

► it or cop another 2,000 lines. But the worst is thanks to Angelface, who, in this pre-vaccine era has contracted the highly contagious mumps. Should Eric come in contact with the bully during this playtime, he's sent home, resulting in game over for our plucky work-shy hero.

**U**pon release, *Skool Daze* became a smash hit for Microsphere. The game's colourful and chirpy graphics, coupled with its groundbreaking sandbox game design ensured that both critics and ZX Spectrum owners alike flocked to the tale of Eric and his incriminatory report. A year later a Commodore 64 version appeared and was met with a little more indifference, probably because of its Spectrum-esque graphics and roots. With Microsphere busy on a sequel, *Skool Daze* failed to make it to the Amstrad CPC until a 2015 homebrew effort. The Spectrum-only sequel, *Back To Skool*, proved just as popular, adding a girls' school and a neat twist on the plot of the original, as Eric must place his forged report into the school safe in order to avoid another telling off.

*Back To Skool* (and its spiritual follow-up, *Contact Sam Cruise*) raised the bar, yet it was with 1984's *Skool Daze* where the mould was well and truly broken. With its then-complex layers of interaction, and the ability to move freely within a living and breathing world, most gamers found entertainment with going about their day as normal, avoiding lines and just having fun immersing themselves in school life. Microsphere may have called time after *Contact Sam Cruise*, yet it leaves behind a game that is not only hugely compelling but also, in many ways, a definition of the plucky nature of the ZX Spectrum itself. Now which one of you scoundrels wrote that rude word on the blackboard!? ★



## DEVELOPER Q&A

We talk to Roger Hulley of Alternative Software about Skool Daze and Alternative's remake, Skool Daze Reskooled

### Why did you choose *Skool Daze* for re-release back in 1987?

We looked for quality games that had received good reviews, and some that had not got the shelf space they should have through lack of distribution and so on. The Microsphere catalogue was a little different as several of their titles had already been released at a budget price, and on compilations. But I was very keen on *Skool Daze* and as such thought we could give it a further lease of life within our range.

### Did you contact Microsphere directly?

Yes, I called Helen and Dave and asked if they would like to sell the game. Dave was surprised at my interest as first as he thought it had run its course. During the call he also mentioned that he was planning to pull out of developing games altogether, so I asked if we could buy all his games. We discussed a price, and a deal was done.

### What do you think makes the original such a classic?

It was such an original idea at the time, indeed one of the first sandbox games. To have fun you didn't need to beat the game, you could just live and play around within its own small world, causing mayhem and mischief and blaming it on the other characters. Plus of

course you could write rude words on the blackboards. We can now safely say it was years ahead of its time.

### Why did you change the cover?

We were keen to give it a new lease of life so [we] decided to move away from the *Tom Brown's School Days* look and give it a more cartoony and wacky cover. It worked; it went back to number one on the budget chart and hung around the top 30 for some time.

### Why did you choose to go down the route of remaking *Skool Daze*?

Well if you're going to do a remake, it might as well be for a true classic, as is the case within the film and music industries. And of course it's one of my very favourite games.

### What can gamers expect to find in your new version?

We have kept most, if not all, of the original characters and puzzles, including one or two more tasks. Plus *Skool Daze Reskooled* also includes the remake of *Back To Skool*, and a new additional game called *Nu Skool*.

### Finally, does Alternative have any plans for more remakes of Spectrum classics?

Yes, we would love to, if this one does well.

## SKOOL DAZE FACT FILE

Take notes, there might be a test!

- There have been several remakes of *Skool Daze*, most notably the PC game, *Klass Of 99*.
- *Skool Daze's* success led to budget re-releases from Elite on its £2.99 range and Alternative, as well as compilation appearances such as Beau Jolly's *10 Computer Hits*.
- The game loops around until the player either accrues 10,000 lines or contracts the mumps.
- In addition to the mumps and pea-shooter events, a 'mob' of the smaller children, attacking anyone in sight, can sometimes riot on the ground floor.
- In the days before the internet, an encyclopaedia was a player's best friend in solving the game's battle date riddle.
- An inspired piece of game design was the ability to write on the blackboards. Of course, no one ever typed in rude words...
- Points in *Skool Daze* are awarded for feats of naughtiness, activating shields and getting your friends into trouble.
- Disenfranchised with the rampant pirating of their products, the Reidys left games development after *Contact Sam Cruise*, which sold poorly despite glowing reviews.
- With neither Dave or Helen Reidy particularly proficient at graphics, artist Keith Warrington joined the team to design the game's look.
- The game features a novel speed loader and a neat border effect that flashes in time with its opening ditty.
- *Skool Daze* came in at number 23 in *Your Sinclair's* readers' top 100 games list, with its sequel featuring at number eight and *Contact Sam Cruise* at 66.



# Arcade Perfect

## Galaxian

» DEVELOPER: Namco » YEAR: 1979

**T**he success of *Space Invaders* rocked the arcade industry, and competitors quickly released their own takes on the formula.

*Galaxian* was amongst the best of these, as it did away with the predictability of Taito's game – where the invaders were characterised by their regimented formation-based movements, the aliens of *Galaxian* could break ranks to make their own individual attacks. They would dive down the screen in groups of up to three, unleashing shots as they went before eventually exiting and returning to their ranks – if they didn't take your ship out in kamikaze fashion first, that is. The game was a success and spawned a line of sequels, beginning with *Galaga*.

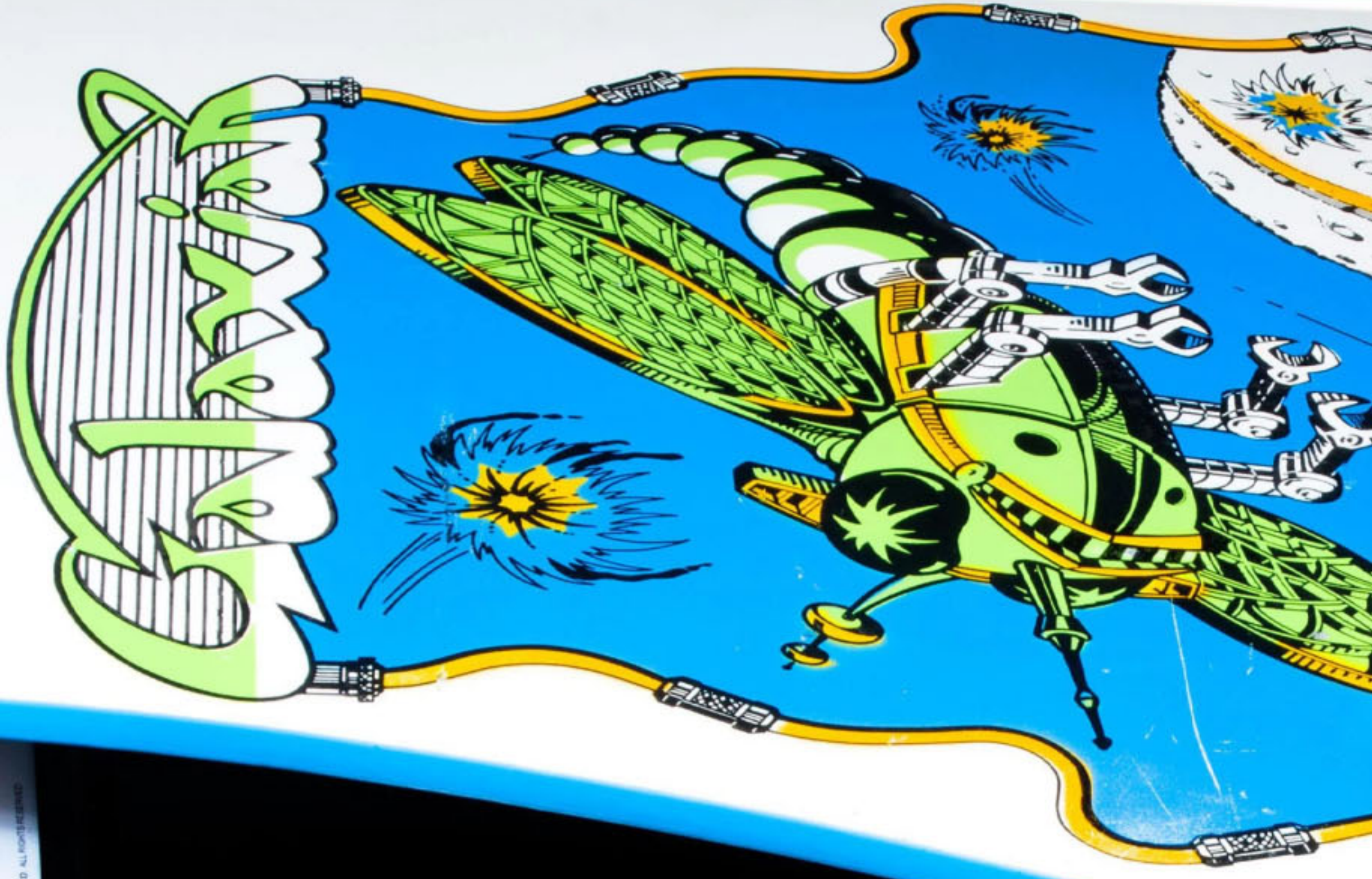
This cabinet from Midway is just as appealing as the game. The predominantly white stand-up machine features detailed side art that gives you an idea of the alien forms that the graphical technology of the day couldn't match, with front art that also shows the aliens. The marquee shows off the game's wonderfully stylised logo, with a starfield displayed in the central gap, and the bezel features a space scene with numerous planets. The simple control panel contains just a two-way joystick, a single fire button and start buttons for one and two players. This is framed with instructional text and illustrations, against a green and blue backdrop that matches the text of the game's logo.

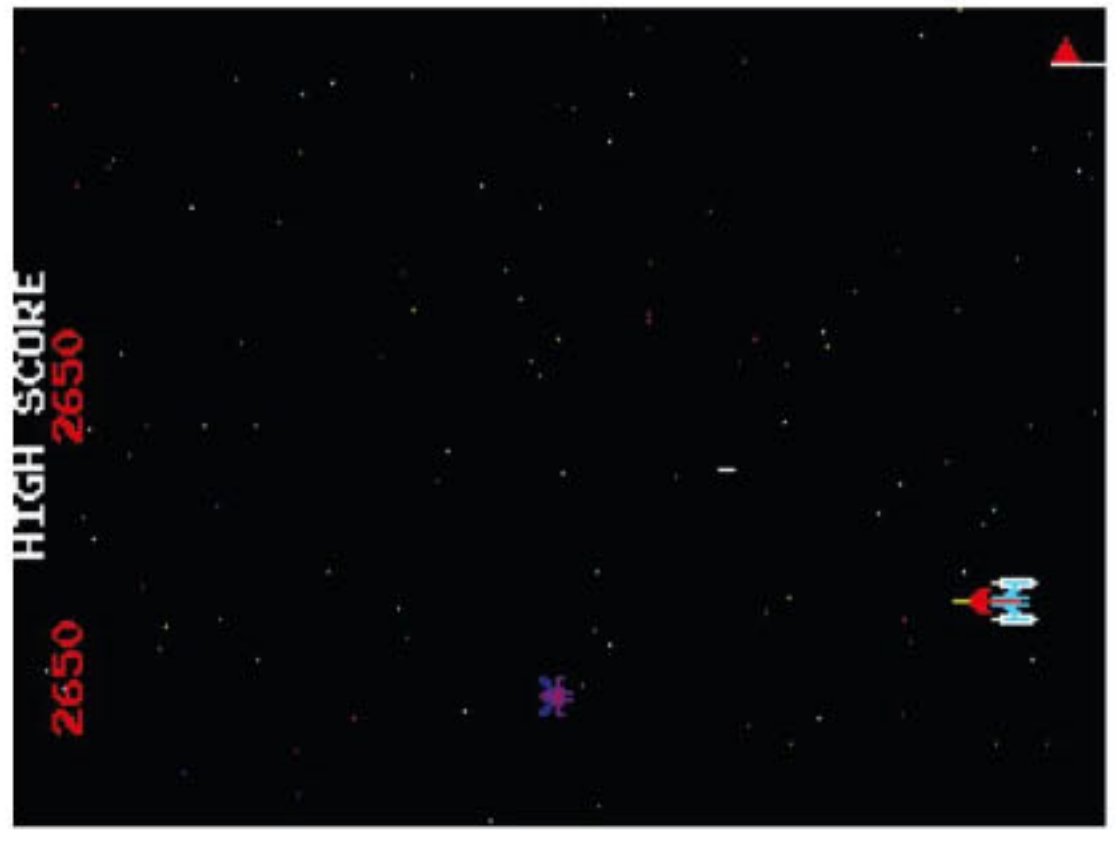
### Galaxian fact

■ Namco gained a now-expired patent on loading screen miiigames in 1995, after including a playable version of *Galaxian* as a loading screen in *Ridge Racer's* PlayStation conversion.



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**STANDOUT MOMENT**  
**The Duel**

Just as *Space Invaders* increased the pace of the game considerably when only a single invader was left on-screen, *Galaxian* throws a spanner in the works when you reach the last enemy. Once the rest of the formation has been taken out, enemy aliens will enter their breakaway behaviour permanently, constantly diving down the screen and firing at you the whole time. Steely nerves are required to survive the assault – and if you do manage to blast it away, you’re just rewarded with another full formation of slightly harder enemies.



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THE EVOLUTION OF

# CYBERNOID

Although defined by its original gameplay and fresh mechanics, Raffaele Cecco's Cybernoid evolved from his previous titles Equinox and Exolon, and then inspired his bigger and better sequel Cybernoid II

Words by Rory Milne





# EQUINOX 1983-20

THE EVOLUTION OF: CYBERNOID



» [Amstrad CPC] Besides its standard blaster, the droid in *Equinox* can collect and detonate smart bombs.

**O**f the many games he worked on, Raffaele Cecco is perhaps most fondly remembered for the 8-bit classics that he created as a solo freelancer during the late Eighties and early Nineties.

But that reputation does a disservice not only to his later work, but also his earliest effort – *Equinox*. Raffaele was just a teenager when he developed *Equinox* for the Berkshire-based software house Mikro-Gen, and as he explains, he was happy to get a little help from his more experienced colleague Chris Hinsley and his more musically inclined coworker Nick Jones. “It was a very small team when I joined,” Raffaele says of signing with Mikro-Gen. “It was just myself, Chris Hinsley, David Perry, Dave Shea and Nick Jones. Chris was a big influence at Mikro-Gen; I believe he was its first game developer employee. He was a great coder, and he was a bit older and more experienced than everyone else. Chris certainly helped me out with *Equinox*. It was my first full game, as I’d only really done a few nice demos before then to secure me a job. I remember Chris helped me design the coloured passcard system for the doors. Along with designing and coding, we were also expected to draw graphics, apart from Nick who couldn’t draw but could play the piano, so he did the music instead!”

While Nick worked on the soundtrack for *Equinox* and Chris helped devise its colour-coded level-pass mechanics, Raffaele decided that the game’s hero should make do with a solitary rechargeable weapon to defend itself from opponents. “It was a decision based on pragmatism,” Raffaele reflects. “It was my first game, so keeping things pure and simple was the least risky option.

The necessity to recharge was a simple way of adding a bit of challenge without adding much more complexity, and the droid had a laser, rather than bullets, so an energy recharge also made sense.”

Rather than making his droid’s lasers powerful enough to breach blocked exits, however, Raffaele devised a secondary objective for *Equinox* that revolved around finding objects to overcome obstacles. “I don’t think the idea of



» After developing *Cybernoid II*, Raffaele Cecco produced the popular fantasy titles *Stormlord* and *Deliverance*.

destroyable obstacles of the *Cybernoid* sort even came up,” Raffaele reasons. “*Equinox* was very much a fly-around-and-solve-puzzles type of game and was more in-line with Mikro-Gen’s previous titles like *Pyjamarama* in terms of pace and exploration. So it was slower and less explosive than something like *Cybernoid*. Also, we were still exploring the limits of the Spectrum at that time – I don’t think we had reached the technical pinnacle yet, and perhaps the idea of being able to destroy big chunks of scenery wasn’t something that occurred to us.”

A third gameplay strand followed, as Raffaele opted to give *Equinox* credit-activated teleporters that could beam the game’s droid to areas where vital objects could be found, although the developer has sadly long since forgotten them. “I don’t remember why we had the teleporters in *Equinox*,” Raffaele admits. “I would speculate that they must have been necessary to gain access to some areas that were otherwise closed off, otherwise why would the player bother spending valuable credits to use them?”

Additional mechanics followed prior to *Equinox*’s release, including time limits on

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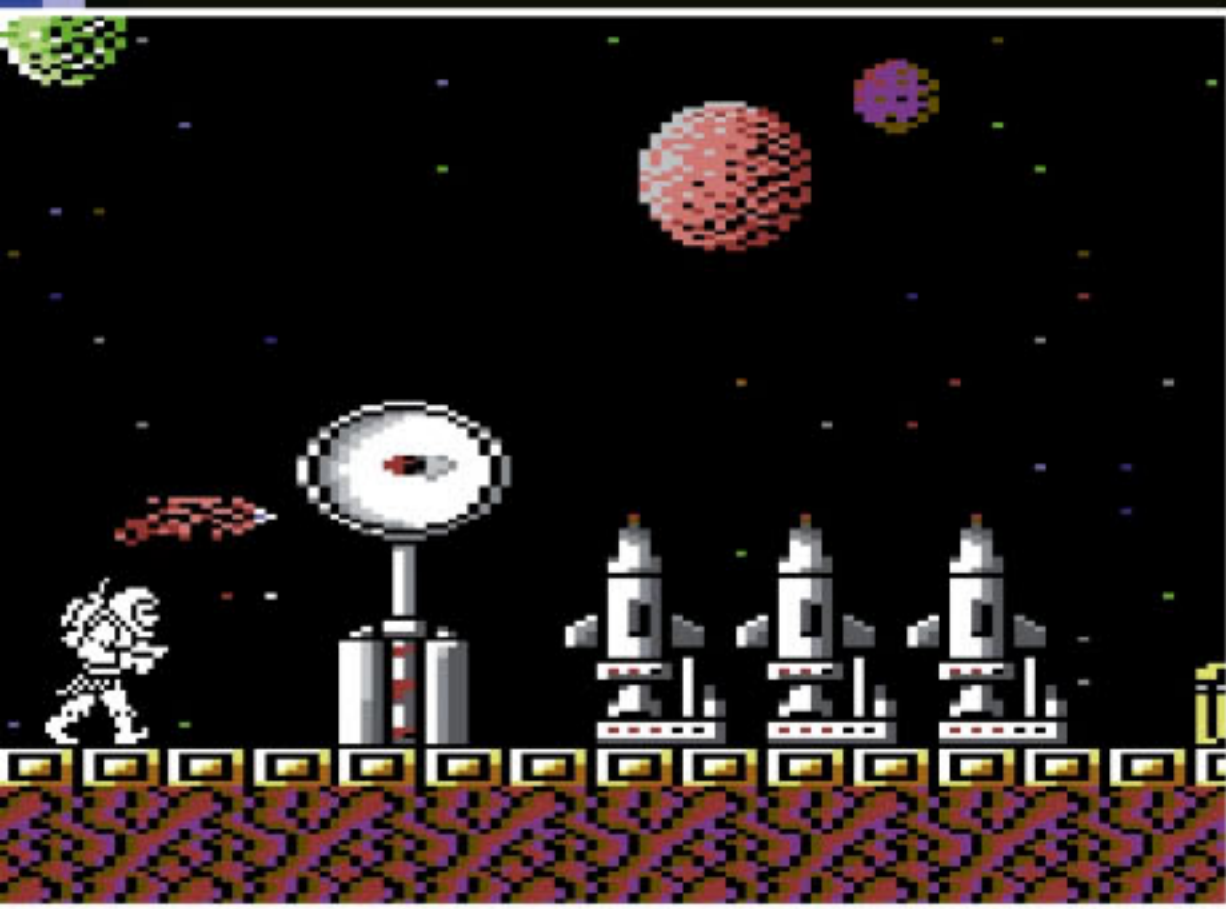
Raffaele Cecco



» [Amstrad CPC] *Equinox*’s multiple entrances and exits facilitate the exploration and backtracking required by the game.



» [C64] *Exolon's* opening screen. You're going to need all those grenades and ammo before you reach the end of the level.



» [C64] Your missiles are incredibly useful as they're able to pretty much destroy most things they come into contact with.

▶ completing its levels, which was something that Raffaele's subsequent sci-fi title would prove tense enough without. "*Exolon* was more of an outright blaster," argues Raffaele, "so I don't think it required any more tension, as each new screen was a surprise that dropped you straight into the action. I think time limits worked better with exploration games, where the reward for remembering map layouts and the location of objects was that you saved time. One of my all-time favourite games was *Super Mario*, and I thought that the time limits on that game worked well, as they gave you just enough slack to complete each level, as long as you didn't make too many mistakes. Then as you got better, you would have a bit of extra time to explore a bit more and find new things."

Rather than taking influence from Nintendo's classic, however, Raffaele reworked a mechanic from *Equinox* when it came to broadening *Exolon* beyond blasting and platforming. "The teleporters in *Exolon* were a completely different gameplay mechanism," Raffaele points out. "They allowed you to instantly dodge out of the way of the homing missiles or other baddies when you entered a screen. I think at the time that was quite a unique feature, and I wish I'd had time to think up more scenarios for their use. But as *Exolon* was a linear run-and-gun, teleporting between its screens like in *Equinox* wouldn't have worked."

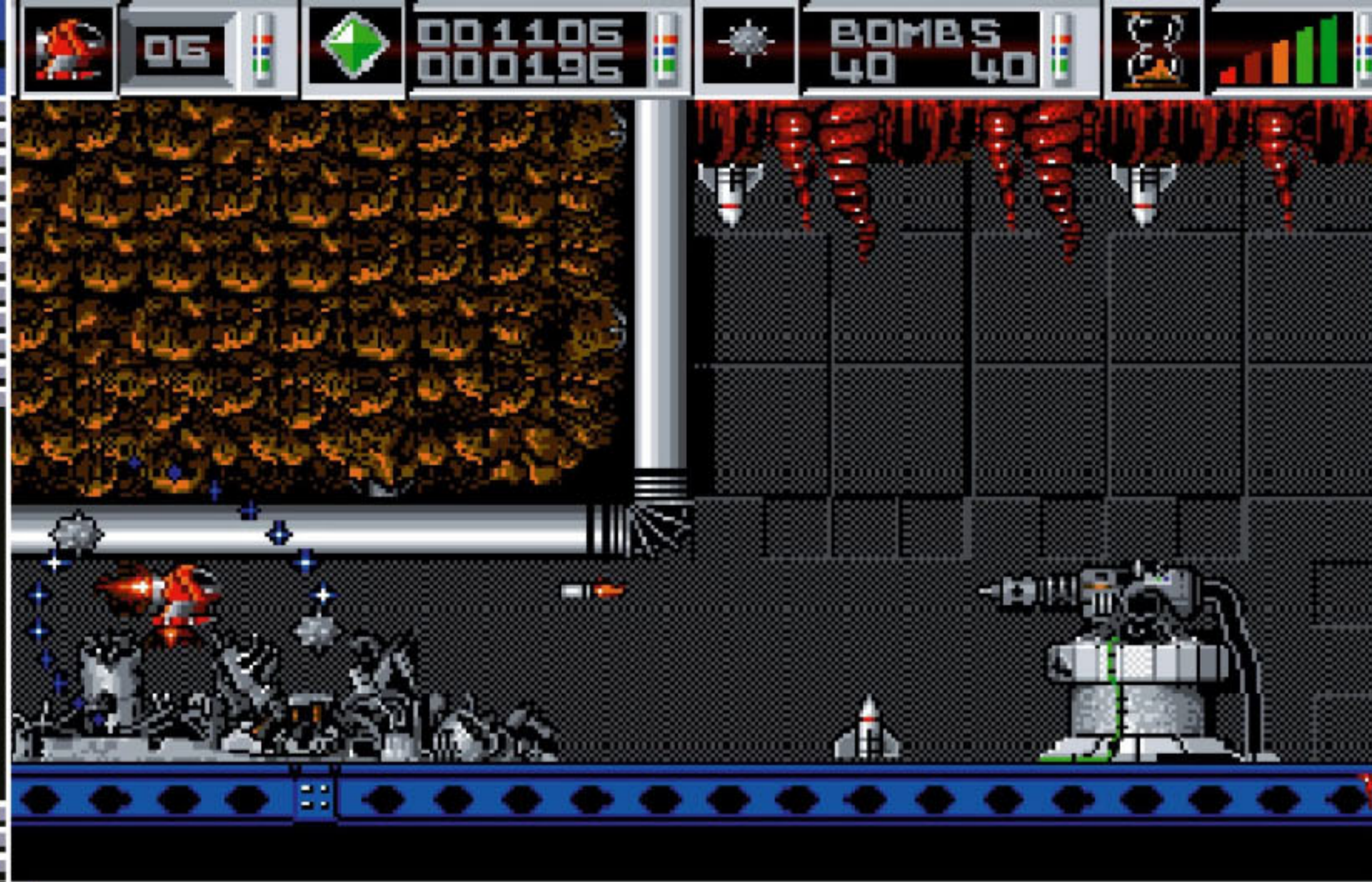
Like *Equinox*, *Exolon* made quite a feature of placing obstacles in its hero's way, although Raffaele decided that they should be blown-up with a rocket launcher rather than being unlocked with objects as in *Equinox*. "*Exolon* was linear – the game was all about moving forwards, dodging and blasting," Raffaele considers, "so I think lock-and-key puzzles would have spoilt that continuity. The rockets and destroyable obstacles fitted in well with the run-and-gun style of the game, plus they looked pretty spectacular. *Exolon* was all about action and visual appeal – remember this was the Eighties, so think of all the over-the-top action movies like *First Blood*, *Commando* and *Predator* that came out in that era! *Exolon* was a reflection of that."

In keeping with its explosive inspiration, *Exolon* outdid *Equinox's* weapon count three-to-one by adding two blasters to its rocket launcher. "Well, run-and-guns need lots of weapons!" Raffaele grins. "Quite simple really, and there was certainly an influence from the multiweapon games that were appearing in the arcades. The double-barrelled gun made it easier to hit flying baddies that would bob-and-weave in front of you. And the over-and-under enemy rocket launcher was a lot easier to beat with two barrels, as you didn't have to crouch-and-stand rapidly to hit the two levels of rockets. So, there was certainly an incentive to power-up to the double-barrelled version. The



» [Amstrad CPC] *Cybernoid's* single-screen stages have one way in and one way out, and can't be returned to.





» [Amiga] Although a shoot-em'-up, *Cybernoid* has platforming elements like foxholes positioned under the line of fire.

**"Cybernoid was clearly influenced by Equinox in some ways – the family resemblance was obvious even if the games played quite differently"**

Raffaele Cecco

backpack rocket launcher was used to clear large static obstacles. It was implemented in order to have a slower-paced but very powerful contrast to the rapid shooting of the basic gun. It also provided a spectacular effect when you destroyed an obstacle, which was quite satisfying – that kind of visual feedback was important."

Indeed, references were made to *Exolon's* explosions in its glowing reviews, and so it follows that Raffaele would double the weapons that you could switch between in its successor – *Cybernoid*. "The multiweapon idea was more of a quick-witted puzzle-thing really," Raffaele says of *Cybernoid's* selectable weaponry. "I liked the idea of having to select the appropriate weapon in a split second as you entered a new screen to maximise the damage to the enemies. It kept the players on their toes in a consistent way throughout the game. In terms of number of weapons, I didn't think two alone would have provided enough gameplay alternatives, so four seemed like a good compromise. It was small enough a number to allow players to get used to them, but it still provided enough variety to keep things interesting, and it allowed me to think up gameplay scenarios that required their use."

But another aspect of *Exolon's* gameplay was overlooked by Raffaele when it came to designing *Cybernoid's* stages, specifically his previous game's exits. "In retrospect, I think I missed a trick in *Cybernoid* by not having multiple exit options," he concedes. "It would have provided a lot of replay value to enter a new screen and discover that the lower portion was only accessible if you had used the lower exit. Perhaps I wanted to just keep the game flowing as it was linear and you couldn't go back on yourself. But if I could go back in time, I would change the game to allow players to have multiple exits and backtrack, not so much

for deep exploration, but to just add a few little route options here and there."

**O**n the specific point of restricting players from revisiting *Cybernoid's* levels, especially given how well this mechanic had worked in *Equinox*, Raffaele

reckons his hand was forced by time constraints.

"*Cybernoid* was clearly influenced by *Equinox* in some ways – the family resemblance was obvious," the developer notes, "even if the games played quite differently. So I do feel the lack of backtracking was a lost opportunity in *Cybernoid*, as I think the game could have been better with it. That was maybe a decision based on the amount of time I had."

Of course, while *Cybernoid* lacked gameplay traits established in the aesthetically similar *Equinox*, Raffaele's latest project boasted mechanics that hadn't featured in his debut title. "There were so many enemies coming in from all angles in *Cybernoid* that a shield was pretty much essential," Raffaele observes. "It really helped when you had to balance your ship in between those up-and-down enemies inside the columns. Let's be honest here – the game was bloody hard, so the shield was maybe a safety net to allow less-skilled players to progress a bit more!"

Further evolutions followed, but unlike its shields – which took their lead from *Exolon's* protective exoskeleton suit – *Cybernoid's* power-up mechanics were entirely original. "This was a risk-reward element: destroy the enemies to obtain the power-ups," Raffaele explains, "for example, the spinning mace or the ammo for your currently selected weapon. At this point, I was finding it easier and easier to implement new ideas on the Spectrum, so adding the pick-ups as an additional gameplay element felt like a natural thing to



## STAGES OF EVOLUTION:

### Collectible objects

From lock-and-key puzzles to reloading weapons to multiple power-ups

#### EQUINOX

■ You can't get far in *Equinox* without collecting objects, as it defines the game's core objectives. Besides radioactive canisters that have to be deposited in disposal chutes, there are transporter credits and level passes. The game also has lock-and-key puzzles, where you have to find suitable objects to overcome obstacles.



#### EXOLON

■ There are technically four pick-ups in *Exolon*, although its double-barrelled blaster comes with the game's titular exoskeleton armour. The game's remaining collectibles are ammo for its standard blaster and rockets for its rocket launcher, which you really have to work for since they're always located behind enemy lines.



#### CYBERNOID

■ Amassing weapons and shields is important in *Cybernoid*, and the game's secondary objective also revolves around collecting. The goal is to recover a set amount of jewels and valuable minerals from your opponents on each level, which requires a hell of a lot of blasting and scooping up of stash, and it's all against the clock.



## STAGES OF EVOLUTION: Guns and ammo

How a single firearm led to an exoskeleton then alternating weapons



### EQUINOX

■ *Equinox* arguably has two weapons – there's a one-time-use smart bomb hidden away in each of its levels, but for the most part you have to rely on a blaster to fend off your opponents. The bad news is that your blaster only has so many shots, and then you're defenceless until you recharge it.



### EXOLON

■ Given that it's more run-and-gun than platformer, it's unsurprising that *Exolon* has a big armoury. As well as a blaster to dispatch foes, there's a double-barrelled variant to combat twin-headed missile launchers, a mine-resistant exoskeleton and an obstacle-destroying rocket launcher.



### CYBERNOID

■ *Cybernoid* only has three more weapons than *Exolon*, but four of those: bombs, mines, bouncing bombs and heat-seekers – plus a shield – are held simultaneously and can be swapped between. *Cybernoid* also has a rotating mace and rear cannon that allow for unlimited use.



### CYBERNOID II

■ Instead of four selectable weapons, this sequel gives you six – the new armaments are time bombs, smart bombs and tracer bombs. The original game's rear cannon and mace return in *Cybernoid II*, but there's also a collectible Cybernoid craft that acts as a second mace.

► do within the time I had. I really liked the idea of enemies dropping things when you destroyed them, as it gave a real incentive to get stuck in, plus there was that element of surprise when you saw what they had dropped."

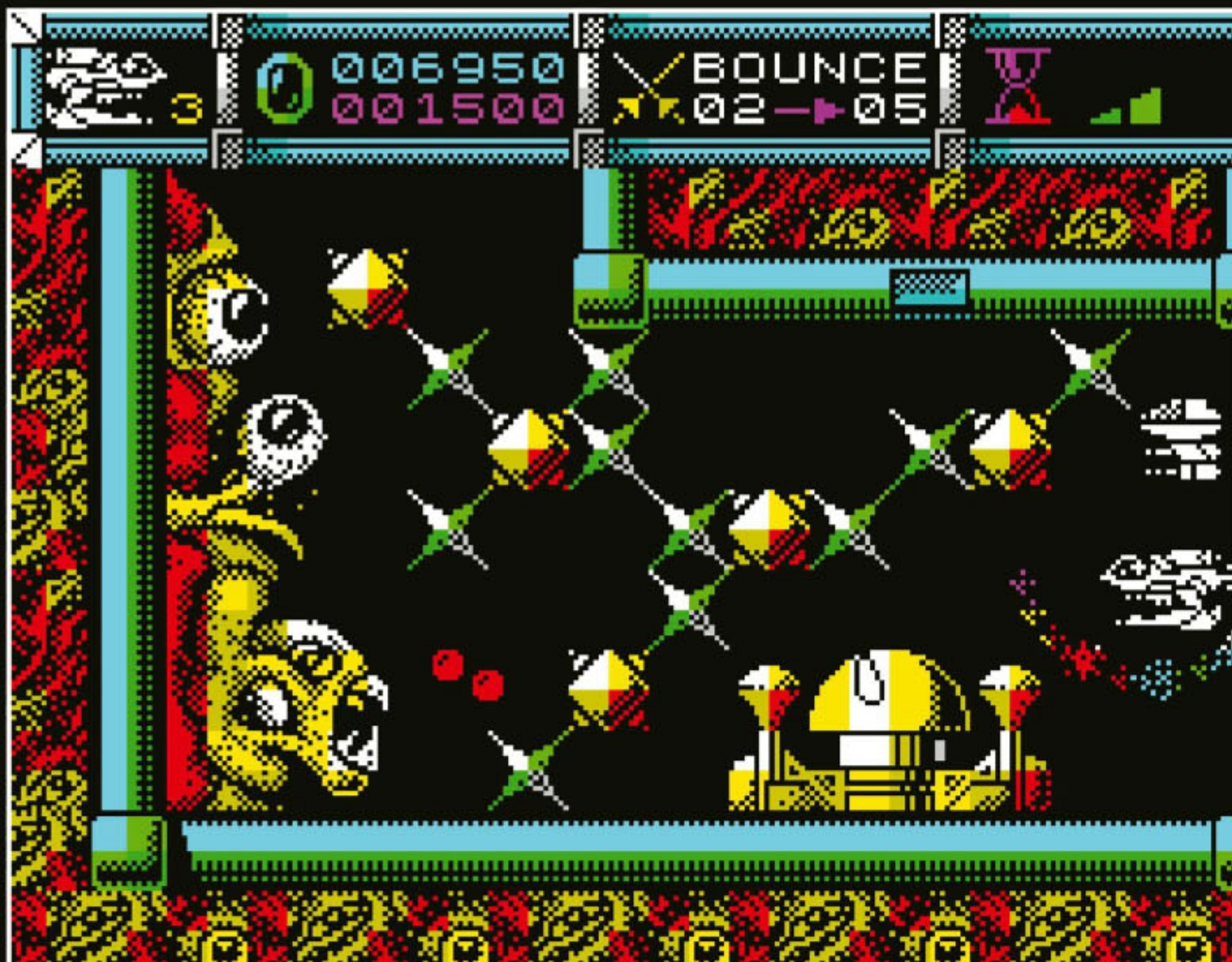
A second deviation from *Exolon* resulted in *Cybernoid*'s obstacle-strewn stages having to be completed against the clock, as had been the case in *Equinox*. "I think a time limit suited the frantic pace of *Cybernoid* where you whizzed around in a spaceship rather than plodding along in combat boots," Raffaele ponders. "It all added to the sense

of urgency and drama of the game – dodge, shoot, shoot, bomb, explode, get the pick-ups and then on to the next screen! You could never really relax when playing *Cybernoid* – you even had gravity working against you since you had to press 'up' to maintain altitude, so the constant action and movement worked well with a time limit."

A major contributor to *Cybernoid*'s action followed, as Raffaele incorporated platforming puzzles into his latest game's single-screen stages, in keeping with those in his previous title *Exolon*. "I never thought of *Exolon* or *Cybernoid* as platform

games," Raffaele clarifies, "or at least, that wasn't in the forefront of my mind when designing them. I considered them to be action games, and I used platforming elements to compliment the action aspect rather than distracting from it. I used background elements to create obstacles and gaps without thinking about 'platforms.' But ultimately, as soon as the player had to negotiate some scenery to land – or jump onto something – then I guess the games earned 'platform' credentials by default, even though that wasn't the essence of the games. For me, a 'platform game' was something like *Donkey Kong* or *Super Mario*."

**I**n truth, *Cybernoid* was never a platform game – or a shoot-'em-up or a puzzle game, but it did channel those three genres, and its eclectic gameplay went down so well with players that a sequel was a foregone conclusion. "I don't remember any specifics regarding the choice of weapons," says Raffaele on increasing *Cybernoid*'s four armaments to six for *Cybernoid II*, "nor do I remember why some might have been altered or chosen for replacement. However, I can speculate that decisions would have been based around offering the players new gameplay twists and options. It was a fine balance between giving



» [ZX Spectrum] The Spectrum version of *Cybernoid II* has even more confined stages than the ZX Spectrum *Cybernoid*.



» [C64] Instead of land mines, like *Cybernoid*, *Cybernoid II* has time bombs, which detonate seconds after release.



» [NES] The NES *Cybernoid* has three difficulty modes; 'Lethal Mode' is even tougher than the Spectrum original.

**"I think a time limit suited the frantic pace of *Cybernoid* where you whizzed around in a spaceship rather than plodding along in combat boots"**

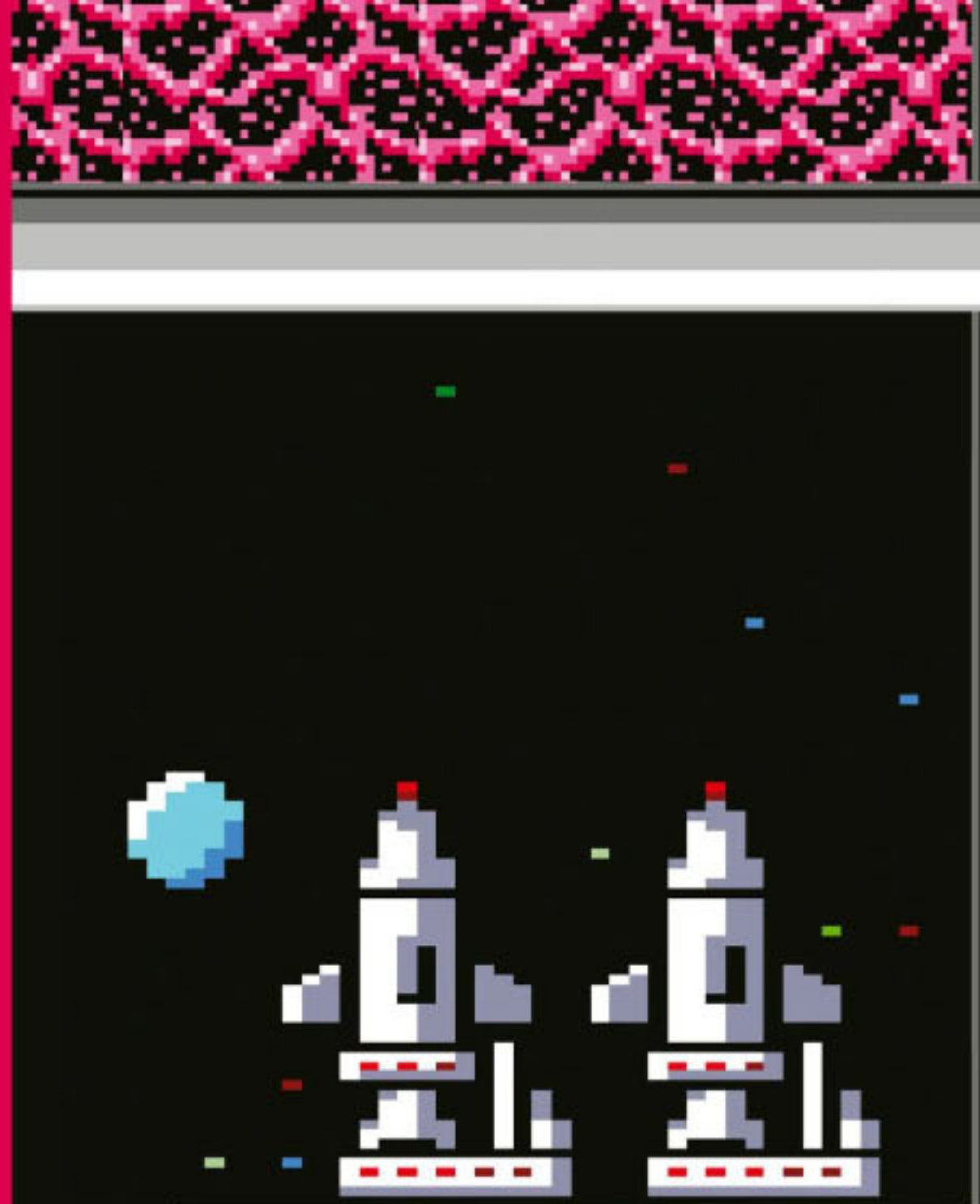
Raffaele Cecco

players something new and not altering the gameplay that they had enjoyed previously." In terms of inspirations, Raffaele credits the arcades of the Eighties for *Cybernoid II*'s 'tracer' bombs, which travelled around the edges of the screen, and his sequel's collectable rear cannon, which fired in unison with a front-mounted blaster. "By this time, I think I'd been influenced by a lot by games such as *R-Type* with their plethora of weapons," the developer acknowledges. "The tracer bombs were any easy score for me, as they used the same tracking logic as some of the baddies from *Cybernoid*. The double gun didn't really require much thought – it was a pretty standard power-up for a spaceship. It was effectively enhancing the gun so that it required less accuracy from the player so that they could concentrate on other things on the screen." Of the many other evolutions *Cybernoid II* made over its predecessor, Raffaele highlights one in particular that provides him with a certain amount of validation – the follow-up's alternate routes through its stages. "As I mentioned earlier, I think not having alternate routes and exits through screens was a lost opportunity in *Cybernoid*," Raffaele reiterates. "I can't remember why they weren't implemented, but one thing I can say is that I don't think that alternate routes would have made *Cybernoid* even more difficult. But I don't feel too bad about it seeing as I implemented them for *Cybernoid II*, and they certainly would have differentiated the two games without deviating too much from the original concept."



» [ZX Spectrum] Canisters reclaimed from defeated opponents in *Cybernoid* power-up your current weapon or shield.

Reviewers and gamers were in agreement that *Cybernoid II* improved on its predecessor without slavishly copying it. Although Raffaele's desire to go in fresh directions coupled with the ascension of 16-bit gaming subsequently cut the lineage that had produced *Cybernoid* short. "I think a scrolling version of *Cybernoid* could have been on the cards if we had continued with the franchise," Raffaele teases. "That would have worked really well for a *Cybernoid*-like game. And it would have been technically possible, as I'd created scrolling games like *Stormlord* and *Deliverance* towards the end of my relationship with Hewson. Unfortunately, the opportunity never arose as I'd moved on from Hewson around that time and was looking towards 16-bit machines like the Atari ST and Amiga." \*



## STAGES OF EVOLUTION: Know your limits

How energy bars evolved into limited shots and power-up counts

### EQUINOX

Everything in *Equinox* is metered: your droid's fuel, its blaster's ammo, its energy and the time given to complete each level. Thankfully, fuel and blaster ammo can be replenished if low, but running out of fuel costs a life. The energy and time you have per level is finite, however, which creates a real sense of urgency.



### EXOLON

Perhaps because its stages are essentially puzzles, *Exolon* gives you as long as you like to complete each block of single-screen stages. But your hero's hand-arm has limited ammo, and his mobile rocket-launcher has even less. He has lives rather than an energy bar, but his *Exolon* exoskeleton lasts as long as he stays alive.



### CYBERNOID

*Cybernoid* certainly has limits: it limits the time for its cargo side-mission and its hero has limited lives, but the game also limits its power-ups. Different enhancements have differing storage capacities – depending on how powerful they are, and they can be recharged with pick-ups, but only by one unit per pick-up.





Though there were only a handful of bugs left to iron out before its release, this fast-paced run-and-gun never saw the light of day. Now, 25 years later, this retro game has finally been released, and we talk with the developers that were determined to see the game finally hit the shelves

Words by Adam Barnes

**W**hile there have been countless tales of diehard developers working hard to see things to fruition, rare are the opportunities for us to cover something that is at once both retro and modern. But that's the story of *Hardcore*, a game that was so close to the finish line that it could taste the Mega Drive cartridges, and yet sadly never made it over that last hurdle... until 2019 where it would finally see a release under the name *Ultracore*.

It began at DICE. Before *Battlefield* was even a twinkle in the Swedish developer's eyes, it was making its start producing games for the Amiga as part of a demo group known as The Silents. By 1992, however, the four university friends had enough of creating small games as part of the demo scene and instead branched out with its own full release: a pinball game by the name of *Pinball Dreams*. It sold well and proved the four developers had what it took to make it in the industry, and so Digital Illusions was founded. "We were deeply involved with the demo scene, so we had a wide network of connections," explains Fredrik Liliegren, one of the four founders. "And through that we sent out the message that DICE is looking for

people working on a game project that might want to be represented by us." As part of this, the company found others in the demo scene that were interested in having their own titles produced, and through that the two original developers of *Hardcore* were discovered. "Someone knew Joakim [Wejdemar] and he contacted us and said, 'Hey, me and this programmer Bo [Staffan Langin] are working on a title that's similar to a *Turrican* game that we'd like to be represented by DICE.'" This would be one of two games that DICE would initially be representing, working with two two-man teams. The first would be *Benefactor*, a puzzle platformer scheduled for 1994. The second was meant to be *Hardcore*.

"They had a character on-screen and shooting some stuff," says Fredrik. "But I don't think they had a complete design, level layout, all that stuff was developed under the DICE umbrella. They had a core idea, a core functionality, but very little of the game was done." It was enough, however, to tempt the developer to back it, in part because the team had known the two devs a little from within the demo scene.

There wasn't much to go off at first, admits Fredrik, though the base idea evolved to include features like



» [PS4] Though *Ultracore* is releasing on modern consoles, nothing has been done to alter its original retro game design.

**“We wanted a nice difficulty curve but the problem was that we were all really good at playing games”**

Fredrik Liliegren

360-degree shooting. Once Digital Illusions got involved, however, the studio leveraged its experience to help Joakim and Bo create a more refined game by asking the questions they needed to be thinking about.

**B**ut the experience that DICE had was still fairly limited, and this led to design that would provide the game with its name. "We wanted a really nice difficulty curve," recalls Fredrik, "but the problem was that we were all really, really good at playing games, so when we created a difficulty curve we did so for

ourselves. And then when we had some of the earlier tests, when we brought in people that hadn't had as much exposure to games as we did, I think it was quite brutally hard. That's how the name was developed, because people were saying to us, 'You guys are nuts with this difficulty level.' So we were like, 'Okay, maybe it's for hardcore players.'"

Once the team had a version up and running, it was Fredrik's job to go and search for partners. He explains he went to publishers that DICE had worked with on the company's earlier pinball games, but also those that had "shown interest in our previous [titles]". This was how Psygnosis came to be involved, signing with Digital Illusions for both *Benefactor* and *Hardcore* as projects for the Amiga and the Mega Drive. "It was their decision to move it over to Mega Drive and they felt that this was more of a console type of game," explains Fredrik, who adds that this was one of the reasons DICE went with Psygnosis in the end. "Pretty quickly after signing they dropped the Amiga. And then, eventually, when the Mega-CD came out, they wanted us to do an additional level, and this was



» The artwork is detailed and would have certainly raised eyebrows if *Ultracore* was released for the Mega Drive.



» [PS4] As with any 16-bit run-and-gun there's a variety to the weapons that's often limited by ammunition type.

## THE TREASURE HUNTERS

How *Strictly Limited Games'* search for lost treasure is only beginning

An aspect of *Ultracore* that might be interesting to retro fans is *Strictly Limited Games*, the publisher bringing it to market. "When we started *Strictly Limited*, we started with releasing digital-only games in physical forms," says Dennis Mendel, one of the two cofounders. "Benedict Braitsch [the other cofounder] and I are both collectors, and so we both love having the physical copy on our shelves and being able to play it in ten years without the need to rely on the digital download store."

There are more retro resurrections in the works, including a physical release of *R-Type Dimensions*. "This was the start, and the money we get from there we will be investing in digging out lost treasures and bringing them back to the community. This is basically the next step. As we see with *Hardcore/Ultracore*, there are good games still out there."



# POTENTIAL COMPETITORS

What *Ultracore* would've been up against



## MEGA TURRICAN

■ As the game that inspired the creation of *Ultracore*, naturally there are a lot of comparisons to make. The look and feel of *Mega Turrigan* is quite uncanny with *Ultracore*, though the latter's spectacle – as the robot enemies shatter into debris that bounces across the floor – would've helped it to stand out.



## CONTRA: HARD CORPS

■ A big focus during the development of *Ultracore* was to ensure slick, 60fps gameplay. This was naturally well suited to the Mega Drive, but that's something that *Contra: Hard Corps* demonstrated exceptionally well. The larger-than-life boss fights are equally comparable.



## GUNSTAR HEROES

■ The difference here was that *Gunstar Heroes* is more of a typical run-and-gun, while *Ultracore* allowed for a little more exploration. *Gunstar Heroes* became popular because of its intense combat that could be played in two-player mode, and perhaps that would have edged it out in the end.



» [PS4] Platforming is a significant part of the game, with large, spacious environments to explore and secrets to discover.

► where the driving level came in, which was primarily put in to support the Mega-CD version.”

**B**ut this switch to the Mega Drive resulted in a lot of extra work. The art needed to be reworked, new optimisations needed to be added to allow the slower CPU to handle 60fps, and even the sound had to take a hit due to the limitations of the hardware. “The switch to Mega Drive was a massive undertaking, it did a lot of different things for us,” says Fredrik. The combination of all this extra work did mean that development rolled on, but the result was a polished shooter that could cut it with the very best of them.

But, of course, the game was never released. The extended development had its cost and though *Benefactor* had already released, *Hardcore* was just too late in the day for Psygnosis to consider releasing. “They cancelled I think 12 titles that were in development on the Mega Drive at the time,” recalls Fredrik. “The market had moved on as well.” DICE tried to find others interested in taking on the title, but it was just too hard a sell when everyone was already moving into 3D. Worse still, *Hardcore* had already been well received in early magazine previews and even had “only one bug left before it could go to certification”. *Hardcore* was ultimately left unpublished and – with no one



interested – it seemed like that would be the way it would stay.

“I showed up in this story around 1998,” says Mikael Kalms, the man who would come to restore life back to the game. “I was straight out of high school and working at DICE, and this was years after *Hardcore* had been cancelled. Around that time DICE was about 20 people, and even then the people that worked on it talked quite fondly of the game. That made me curious.”

This fondness with which DICE developers spoke of *Hardcore* piqued Mikael's interest, enough that one Friday around 2001 or 2002, he and a friend opted against going for drinks with their colleagues and instead decided to try and search for the lost *Hardcore* data.

The first stop was the hardware closet. While digging around, the pair found a lot of old equipment: a PC that housed a PlayStation dev kit, an old Mega Drive with a bootleg dev cartridge that had been used to test *Hardcore* and, finally, a machine that “looked kind of like an Amiga 3000”. This turned out to be one of the first Amiga 3000 prototypes sent to Europe, but unfortunately the device just didn't work, a faulty power supply all but stopping the duo from searching for signs of the lost game on the device.

After a spot of



## DEVELOPER HIGHLIGHTS

### PINBALL DREAMS

(PICTURED)

SYSTEM: AMIGA, PC, SNES

YEAR: 1992

### BATTLEFIELD 1942

SYSTEM: PC, MAC

YEAR: 2002

### STAR WARS

BATTLEFRONT

SYSTEM: VARIOUS

YEAR: 2015







» [PS4] One of the things that can't be appreciated in these screenshots is the awesome soundtrack.

» [PS4] Ultracore's Turrican inspirations are clear to see.

Frankenstein work with a PC power supply and a soldering kit, they were able to get the machine up and running. But that wasn't the only problem to solve: the hard drive was failing and, if they weren't careful, the data that seemed like it could have been *Hardcore's* source files could have been lost forever.

But after transferring these files over onto floppy discs and onto a working PC, the pair could explore the folders. "There was source code of the game, absolutely," says Mikael. "But it was really difficult to tell. Whoever was working on the game, it wasn't in the days when we were using nice version control systems." After rifling through these "smattering of files", Mikael stumbled across the final build of the game. Mikael could actually play the game that had made so many DICE employees wistful of what could have been. "That was the final packaged version of the game," Mikael adds. "That was what we

uncovered back in 2002, and I stored that in a backup hard drive, which I had a closet in my home. And I kept it there until 2017."

**I**t was at this point that publisher **Strictly Limited Games** comes into play. "I knew *Hardcore* since the early Nineties because my parents had a bookstore and we had all the game magazines," explains Dennis Mendel, a self-confessed retro collector who, as cofounder of the publisher, seeks to bring digital – and now lost – games over into the physical realm. "That was the first time I read about *Hardcore* and I actually forgot about it," he admits, adding that a tease about the company's release of *Wonder Boy Returns* ultimately led him back to *Hardcore*. "This caused a customer of ours to contact us and tell us that about *Hardcore*, that he knows someone – which was Mikael – that was involved with *Hardcore*, and from there the whole thing started." Mikael was happy to help get the ball rolling but he had his own work to deal with, so it would be Dennis and his team that put this forgotten gem out into the world.

"We just had the problem that the licence was with Sony," Dennis says. "We pretty much sent emails to everyone we knew there." Strictly Limited Games managed to get a response, with Sony – which had acquired the rights to Psygnosis and its games – agreeing to the release of

**“I was hoping that it would be good, because if it wasn't, what could we do?”**

Dennis Mendel

the game so long as the name was changed – and with that, *Hardcore* became *Ultracore*. "It still sounds like a Nineties title!" Dennis laughs.

"I was a bit worried," admits Dennis about the risk of releasing a game that no one besides its developers and a handful of press had played. "I was hoping that it

would be good, because if it wasn't, what could we do?" Thankfully, the game is great fun. "It is awesome, and so it was a huge relief when we played it and really, really enjoyed it. But first and foremost, we really hope that the original team will be relieved that the game finally found its audience." ★



» [PS4] There are in-game vendors, in case you run low on ammo or energy.



» [PS4] Ultracore was supposed to be a showcase of what DICE, as a developer, stood for.



THE HISTORY OF

# GUILTY GEAR



Have you ever wanted to see a sleeping man in a robotic combat bed beat up a surgeon wearing a paper bag? Arc System Works' eccentric games offer all that and more. Daisuke Ishiwatari recalls how the series rose from obscurity to become a heavyweight contender in the fighting field

Words by Nick Thorpe

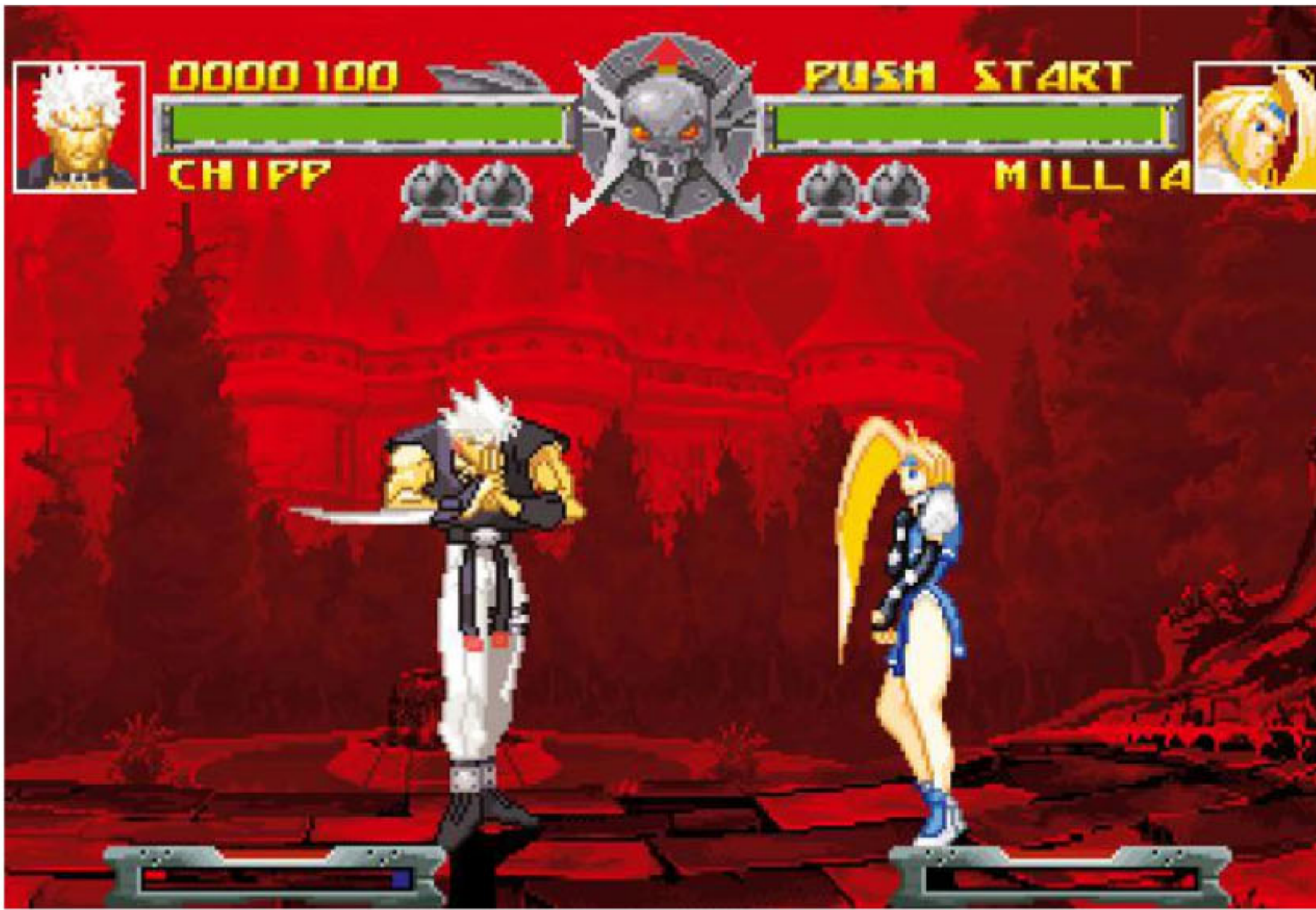


» [PlayStation] Sol Badguy, despite what his name might cause you to believe, is the series' protagonist.

**W**hen *Play* reviewed *Guilty Gear* in 1998, the review opened with the assertion, "If you're not Capcom or SNK, people don't want your old school beat-'em-ups. They won't take you seriously." This harsh statement bore some truth at the time but it would sound ludicrous if said today, as players most definitely take Arc System Works' fighting games seriously. Its original properties *Guilty Gear* and *BlazBlue* are staples of tournaments and the developer has been entrusted to create fighting games for licensed properties, including *Persona 4* and *Dragon Ball Z*.

It's fair to say that the developer is one of the world's premier creators of fighting games, and the road to that level of respect started with the *Guilty Gear* series – a 2D fighting franchise in which armed and unarmed fighters battle to protect the world from living weapons known as Gears.

The key creative force behind *Guilty Gear* is Daisuke Ishiwatari, who has served as the series' director as well as providing character designs, graphics, music composition and even voice acting. "I'd always dreamed of making my own fighting game after being heavily influenced



» Daisuke Ishiwatari is the driving force behind the *Guilty Gear* series and still works on it to this day.

are otherwise relatively down-to-earth designs, but many other members of the cast are truly bizarre. There are only ten standard fighters in the game, plus a couple of unlockable bosses and a hidden fighter, but there are no palette swaps or fighters with suspiciously similar fighting styles – fighters are unique, and often have playstyles that are distinctive within the genre. With that in mind, we had to ask – was there a conscious drive to create such distinctive and interesting characters? “Thank you for calling the characters interesting,” says Ishiwatari, clearly proud of his creations. “I think it stems more from my own mindset than *Guilty Gear* itself. Whenever I come up with an idea, I always imagine the players’ reaction to it. When I do, I want to provide the players with as fresh an experience as I can, such as how the character moves, how they play, how they speak, and how they think. I try to make it so that they’re not all that easy to predict.”

As well as having distinctive characters, *Guilty Gear* is well known for its connections to rock and heavy metal – for example, Ky Kiske’s name was derived from combining Halloween’s Kai Hansen and Michael Kiske. With that in mind, it’s no surprise that the soundtrack is filled with guitar riffs. “At the time I came up with *Guilty Gear*, a more techno-style soundtrack was the norm for fighting games,” says Ishiwatari, when asked why

the team chose to focus on this genre. “As a fan of hard rock and heavy metal, I believed that distorted guitar sound would allow for better expression of ▶



» [PlayStation] When the background turns red, you’re in danger of being instantly killed.

## GUILTY PARTIES

A GUIDE TO THE PLAYABLE FIGHTERS OF THE GUILTY GEAR SERIES

from playing Capcom’s *Street Fighter II* back in my student days,” says Ishiwatari. “But fighting games at the time essentially all had character designs based on actual martial arts. I thought the characters and worlds of manga and anime were interesting, and wanted to make a fighting game with the kinds of superhumans who could fly – a game that allowed you to move more freely and broaden the players’ imaginations. So the idea at the time was for a game that gave you an exhilarating rush.” That feeling was conveyed with the inclusion of some outlandish movements such as double jumps, midair dashes and aerial recoveries. “With the first *Guilty Gear*, we viewed the excitement the players felt from the moment you touched it as more important than its structure as a fighting game, and thought of it more as an ‘action game where you can fight each other’.”

The influence of manga and anime on the character design of *Guilty Gear* is easy to see. The most prominent characters in the story, Ky Kiske and Sol Badguy, have the requisite spiky hair but



### AXL LOW

DEBUT GUILTY GEAR

■ This time traveller wishes to return to his own era and his girlfriend. He fights using a pair of chained sickles, and is a clear shoutout to Guns N’ Roses frontman Axl Rose.



### CHIPP ZANUFF

DEBUT GUILTY GEAR

■ Fans of Enuff Z’nuff will get the name reference here. Chipp is a speedy character who fights like a ninja and claims to be from Japan, despite being American.



### FAUST

DEBUT GUILTY GEAR

■ Formerly a physician, this lanky oddball was driven insane by the death of a patient. He’s known as Dr Baldhead in the first game, before he dons the paper bag.



### KLIFF UNDERSN

DEBUT GUILTY GEAR

■ As the head commander of the Sacred Order Of Holy Knights, Kliff resolves to put an end to the threat of the Gears. To do this, he has obtained a comically enormous sword.



### KY KISKE

DEBUT GUILTY GEAR

■ One of the series’ most recognisable characters, Ky is a warrior in the Sacred Order Of Holy Knights. He’s capable of shooting lightning bolts from his sword.



» Sol Badguy and Ky Kiske are both series mainstays.



» [Arcade] Venom's pool-based fighting style is one of the unusual character designs that gives the series its unique identity.

► the backgrounds of the characters fighting each other and the feel of the game's overall world. So basically, because it matched my tastes."

Another distinctive aspect of *Guilty Gear* is its inclusion of Destroy moves – instant death techniques that don't just win the round, but the entire match. "It was a completely shallow idea I had when I was young. Since the characters were fighting with weapons, I

figured one wrong hit could kill them in a single blow," confesses Ishiwatari. But that only takes care of the creative theme – what about the game design aspect? "Fighting games are developed around the structure of competition. As a result of that, the gap between the two players' skills reveals itself quite clearly over the course of the match," he explains. "A match with a wide technical disparity between the combatants isn't fun for the players or the spectators, and gives no thrill to what is supposed to be a serious competition. What I wanted to do was add the possible thrill of some sort of accident occurring to everyone." Destroy moves have always been hard to actually land, as they're slow and practically telegraphed, but they are still one of the most divisive aspects of the game. Some love the spectacular attacks and innovation, and others feel that there's too little risk for such an enormous reward. The original *Guilty Gear*'s Destroy moves are particularly reviled by solo players, as this is the only game in the series where computer opponents use them. Despite being controversial, Destroy moves have remained a constant part of the *Guilty Gear* series, but their power has been reduced – and the team has considered removing them. "Now fighting games have become a mainstay of esports, so there exists a need to control those sorts of wild card factors in the game's design," says Ishiwatari. "If

we ever make another *Guilty Gear*, we might do away with instant-kill moves," he laughs.

**G**uilty Gear was released for the PlayStation in Japan in May 1998, with Sammy handling publishing duties. Atlus picked up the game for a North American release in October of the same year, while European players had to wait until Studio 3 published the game in May 2000. Reviews were mixed – at the bottom end, *Official PlayStation Magazine* awarded it a 3/10 score. In *Play*, the game scored 43%, with the graphics criticised for obscuring the action. The reviewer also felt that a fast-paced fighting game was normally a good thing but that *Guilty Gear* "takes it way too far", and that the Destroy moves were a negative inclusion as "there has never been a more irritating way of being defeated by a computer opponent". *CVG*'s review was more positive, stating that the game was "initially totally unappealing," but that patience would be rewarded – "take time figure out some combos and it gets a lot better". The magazine also praised the effort put into the roster and recommended the game to hardcore 2D fighting fans as an alternative to Capcom and SNK's games, with a final score of 3/5. *Eurogamer* was impressed, scoring it 8/10. The reviewer was pleased that he had "felt a lot more endeared to [the characters] than I had expected to" and that "the combination manoeuvres border on the absurd".

The original *Guilty Gear* gained a cult following and sold well despite that mixed critical reception, and reports of an arcade sequel were floating about by early 1999. Bringing *Guilty Gear* to the coin-op environment posed new challenges for the development team, particularly with regard to the game's graphics. "Because Arc System Works was a newcomer in the world of arcade games, we consciously tried to make something that would catch the eyes of passing players. One solution to that was high-resolution graphics," remembers Ishiwatari. "It was originally suggested by Sammy, and the team expressed disapproval at the time." The 2D fighting genre as a whole had been struggling to progress graphically since the introduction of the exquisitely animated



### MAY

DEBUT GUILTY GEAR

■ This youngster is a member of the Jellyfish Pirates, a band of sky pirates with Robin Hood-esque ethics. She fights with an enormous anchor and can summon dolphins.



### MILLIA RAGE

DEBUT GUILTY GEAR

■ This former member of the Assassin's Guild shares a complex relationship with Zato-1 and fights with magical hair. She's named after the band Meliah Rage.



### POTEMKIN

DEBUT GUILTY GEAR

■ Thanks to his enormous size and strength, Potemkin doesn't need a weapon – he just uses his fists. He's also an intelligent chap who doesn't actually like fighting.



### SOL BADGUY

DEBUT GUILTY GEAR

■ More antihero than hero, this brash *Gear* is the protagonist of the series. His real name is Frederick Bulsara, and both of his names are allusions to Queen's Freddie Mercury.



### ZATO-1

DEBUT GUILTY GEAR

■ This high-ranking member of the Assassin's Guild can control shadows due to being implanted with the forbidden beast Eddie, which eventually takes over his body.

# CARRYING YOUR GUILT

AS WELL AS CONVERSIONS OF THE MAIN SERIES, HANDHELDS HAVE PLAYED HOST TO A NUMBER OF UNIQUE GUILTY GEAR GAMES



## GUILTY GEAR PETIT

### WONDERSWAN COLOR

■ This handheld rendition of *Guilty Gear X* features some beautiful tiny pixel art and an exclusive character, a nurse called Fanny. Unfortunately, it's really light on content – there are only seven characters to play with.

## GUILTY GEAR PETIT 2

### WONDERSWAN COLOR

■ Only eight months after the original *Guilty Gear Petit*, this sequel added eight extra characters from the main games and improved the presentation of fights. Of the two WonderSwan games, this is easily the one to pick.



## GUILTY GEAR X: ADVANCE EDITION

### GAME BOY ADVANCE

■ This brave port doesn't quite come off as hoped. The graphical quality of the game is heavily compromised, and while the fighting isn't bad and team modes are present, the CPU opponents are generally too easy to defeat.

## GUILTY GEAR DUST STRIKERS

### DS

■ Rather than offering traditional one-on-one combat, *Dust Strikers* takes after *Guilty Gear Isuka*, offering brawls for four combatants in very tall arenas filled with platforms. It only received a lukewarm critical reception.



## PRO JUMPER! GUILTY GEAR TANGENT?!

### DS

■ This oddball platform game stars Chimaki, the series' mascot, who visits hot springs and gets attacked by a variety of animated spa items. This game was released exclusively through the DSiWare service.



*Street Fighter III* in 1997, as the existing players in the market were either content to reuse existing sprites, or shackled to older hardware. Ishiwatari and his team had no such constraints, but the shift to a 640x480 presentation for *Guilty Gear X* came with both advantages and disadvantages. "Making the characters' facial expressions easier to see and broadening their expressions was good, but the downside was that you had to do it all in traditional pixel art, even when making a single character," says Ishiwatari. Despite arriving between classics such as *Garou: Mark Of The Wolves* and *Capcom Vs SNK*, the striking presentation allowed the game to stand out. "Looking at it in hindsight, I believe it was the right call," admits Ishiwatari. "The team felt vindicated after it received high praise from players."

**T**he underlying philosophy of the game design also had to change for the arcade market.

"Since the first *Guilty Gear* was made for consoles, we figured that even if there were some issues with game balance, as long as the game was fun, friends could just laugh that sort of thing off,"

**"IF WE EVER MAKE ANOTHER GUILTY GEAR, WE MIGHT DO AWAY WITH INSTANT-KILL MOVES"**

Daisuke Ishiwatari

remembers Ishiwatari. "But because *Guilty Gear X* was an arcade game, making it unfair would mean causing the players to waste their money. So we went back to square one on the game's design and ended up focusing on making a competitive game." New techniques were added, including the Dead-Angle attack and the Roman Cancel, and the Destroy moves were wholly revamped into a risky one-shot affair – while a successful attack would still win you the entire match, an unsuccessful one saw you lose your super gauge. *Guilty Gear X* also added a group of five new characters while retaining most of the original cast, giving the game a healthy roster of 16 fighters.

*Guilty Gear X* was released to arcades in the summer of 2000, with conversions

for the Dreamcast and PS2 arriving later. The game attracted more favourable reviews than its predecessor, with *Dreamcast Magazine* awarding the game 80% and *Play* doing the same for the PS2 version. *Edge* awarded the game 8/10 too, with the reviewer claiming that "no other title looks quite this inviting" and praised it as a game that "should entice most fighting disciples". The review in *Official PlayStation 2 Magazine* also scored the game 8/10, as the reviewer felt that the game "achieves a level of balance and depth that means you never, ever, truly master it". *Guilty Gear X* would receive a couple of enhanced versions – *Guilty Gear X Plus* in 2001, a Japan-only PS2 upgrade that added a couple of extra characters, and *Guilty Gear X 1.5*, an arcade-exclusive



## BAIKEN

### DEBUT GUILTY GEAR

■ Introduced as a secret fighter, Baiken is an antisocial woman who hates Gears and seeks vengeance against their creator, a shadowy antagonist known as That Man.



## TESTAMENT

### DEBUT GUILTY GEAR

■ Kliff's adopted son, and a former soldier of the Holy Order. After being turned into a Gear, his goal was to resurrect Justice and wipe out humanity for good.



## JUSTICE

### DEBUT GUILTY GEAR

■ The final boss of the original *Guilty Gear*. Justice was the first 'complete' Gear, and she sees herself as a nemesis whose role is to wipe out humanity.



## ANJI MITO

### DEBUT GUILTY GEAR X

■ This dancer fights using a pair of fans, and is one of the few survivors of Japan's destruction. He seeks to meet That Man simply to satisfy his own curiosity.



## JAM KURADOBERI

### DEBUT GUILTY GEAR X

■ All Jam wants is to run her restaurant in peace, but the events of the story keep getting in her way. Unlike most fighters in the series, she fights bare-fisted.

# SECOND OFFENCE

GUILTY GEAR'S NUMBERED SEQUEL ISN'T QUITE WHAT YOU'D THINK IT WOULD BE



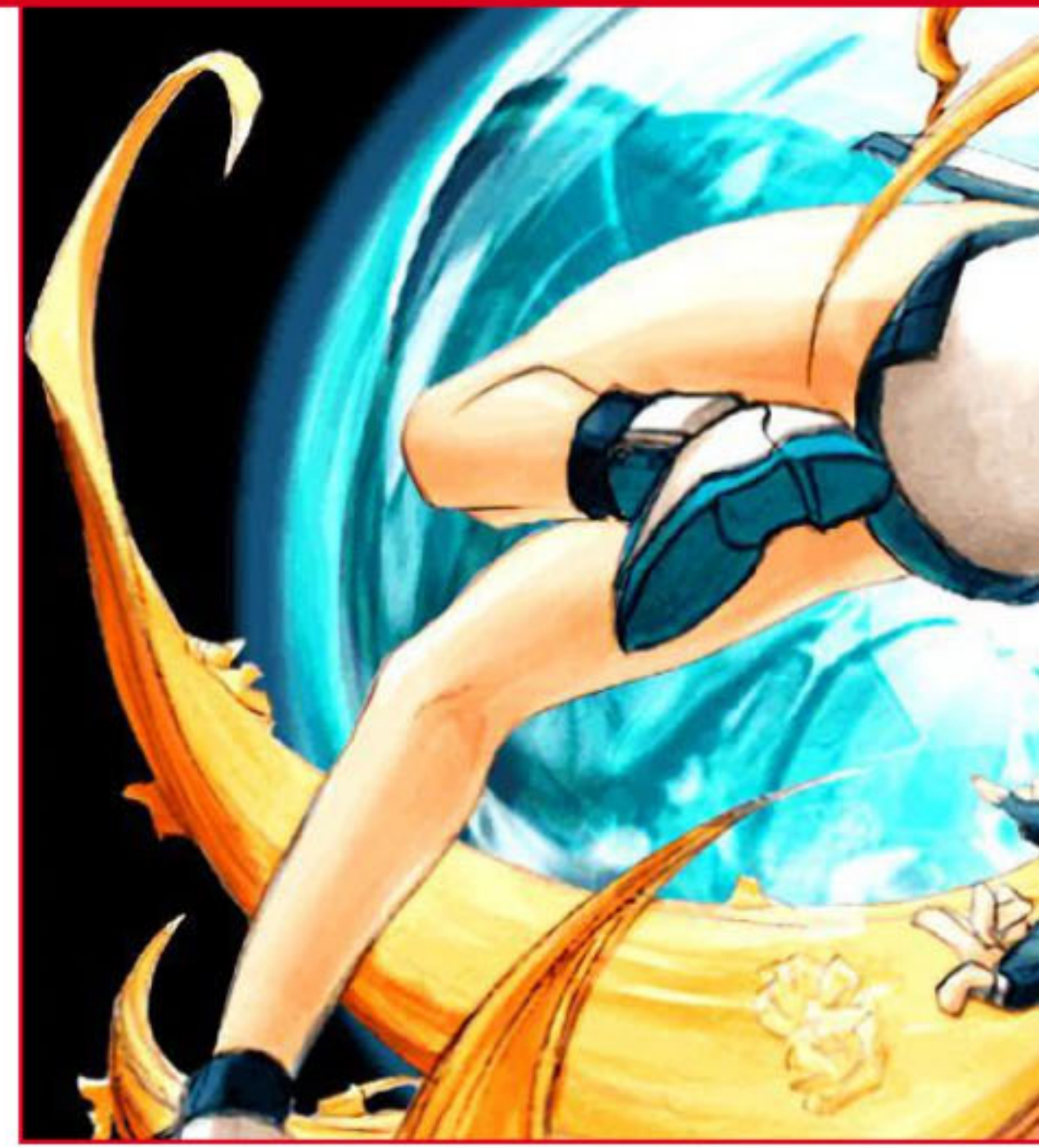
» [Xbox 360] *Guilty Gear 2: Overture* sticks out as an outlier for the series.

Perhaps it should be expected of a series with such unconventional characters that *Guilty Gear 2: Overture* is not a conventional sequel. Although it is still combat-focused, it is a fully 3D game that mixes action gameplay with strategy in large environments. Why implement such a change of direction, especially for a numbered sequel like that? "When making *Guilty Gear XX #Reload*, I'd already made everything I personally wanted to put into a fighting game. So when blessed with the opportunity for

and *Xbox World 360* gave it just 44%. According to Ishiwatari, the game didn't achieve commercial success, either. "This game received good reception from the players who loved it, but unfortunately that didn't translate into profits," he says. "Because of that, I've taken a temporary break from challenging that genre, but I'd personally like to make a sequel someday." The game remains important to the series' story, though, with *Guilty Gear Xrd* picking up its themes and characters.

a new challenge, I wanted to make a new game that would leave its mark on players the way *Street Fighter II* left its mark on me," says Ishiwatari. "Maybe I put a little too much of those feelings in."

The game was released for Xbox 360 in 2008 and later came to PC, but only received middling reviews. *GamesRadar* was amongst the most positive, offering it 3.5/5 and stating that it "actually gets the strategy right". *Official Xbox Magazine* went with a 5/10 score, claiming that the game was overly complicated,



» [PS2] Aerial combat is a key part of *Guilty Gear's* fighting style.

► update from 2003 that added moves and rebalanced the game. Overall, *Guilty Gear X* was the game that established the series as a serious competitor to the major fighting franchises. Why was that possible? "Because I was young, that's why. I sincerely believed that my ideas couldn't possibly be boring," says Ishiwatari. "I am grateful for the support Arc System Works and Sammy provided the team and I back then."

**W**hile *Guilty Gear X* was a success, its sequel is even better and became the basis of 2D entries in the series going forward. Rather than being a complete overhaul as its predecessor had been, 2002's *Guilty Gear XX* builds on the content and systems

of *Guilty Gear X*. Four more characters join the main cast for a starting roster of 20 fighters, with the new Robo-Ky joining Kliff and Justice as secret characters. Building on the previous game's strong fighting mechanics, the new Burst gauge governs the use of the Psych Burst, and sweep and launcher attacks are moved to their own specific button, the Dust button. The PS2 conversion also features EX versions of the main roster, alternative takes on the standard characters with altered moves and gameplay. If that sounds like a lot of complexity, you're right. This is intentional, and something that Ishiwatari feels is crucial to the series. "With the rise of entertainment on cellphones and the internet, the desire to play games could decline in this day and age. The

complex handling that *Guilty Gear* demands may be too much when taking that into consideration. But it is that complexity that also gives *Guilty Gear* its identity," he says. "I also believe that it makes the players reflect on their own idiosyncrasies and makes practice and improvement more meaningful. It adds value to them pushing their skills to the limit. The problem is whether they should be made aware of that in advance, or to see if they can push through it without knowing."

Of course, the complexity of *Guilty Gear XX* only added to its strategic depth, and the game achieved prominence on the tournament scene, with fighting game legend Daigo Umehara winning the *Guilty Gear XX* championship at Evolution 2003. "Like other highly competitive



## JOHNNY

DEBUT GUILTY GEAR X

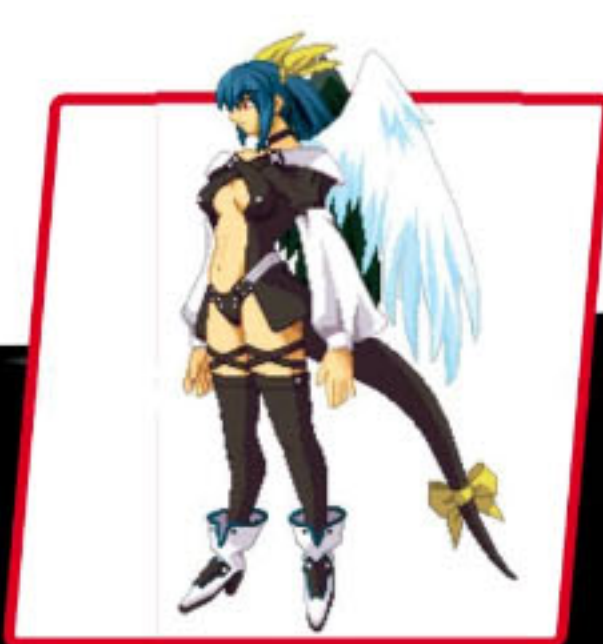
■ As a skilled swordsman and the leader of the Jellyfish Pirates and an incorrigible flirt, Johnny fights to help the less fortunate – and if they're young ladies, all the better.



## VENOM

DEBUT GUILTY GEAR X

■ Zato-1's apprentice within the Assassin's Guild has the ability to kill with anything you care to mention, so he chooses to fight with a pool cue. Yes, really!



## DIZZY

DEBUT GUILTY GEAR X

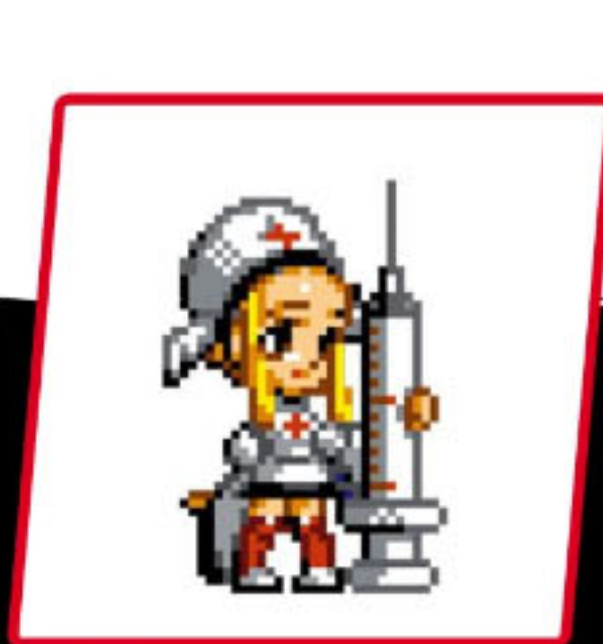
■ This Gear serves as the final boss of *Guilty Gear X*. She's a powerful but reluctant fighter who later falls in with Johnny, May and the Jellyfish Pirates.



## ROBO-KY

DEBUT GUILTY GEAR X PLUS

■ These mass-produced robotic versions of Ky are common earlier in the series, but only one is left by *Xrd*. Despite being important, it's something of a comedy character.



## FANNY

DEBUT GUILTY GEAR PETIT

■ A nurse who fights with a giant piece of medical equipment, not unlike Faust. She was introduced in the WonderSwan games, and has never appeared outside of them.



## THE HISTORY OF: GUILTY GEAR



» [PS2] This fiery background shows that I-No is attempting an Overdrive – but Faust has blocked it.



» [PS3] It's easy to forget *Guilty Gear Xrd -Sign-* is a 3D game until the camera does something like this.

games, the main stage for fighting games is after they're released," says Ishiwatari, regarding the importance of the competitive scene. "Tournaments are important in several different ways; as a place to nurture the player community; as a place to confirm player trends and their desires for games; as a place for creators to confirm they have a responsibility for games and players. I believe the exchange of player and creator intentions is important." The result of that feedback was that *Guilty Gear XX* received a number of updates, keeping the game relevant in tournaments for the rest of the decade.

2003's *Guilty Gear XX #Reload* rebalanced the entire cast and fully reworked the Robo-Ky character. In 2005, *Guilty Gear XX Slash* added two new characters, as well as adding moves and altering move properties for roughly half of the existing cast. Additionally, a visual overhaul saw the addition of new stages and a revamped HUD. *Guilty Gear XX Accent Core* followed in 2006, with enhanced Force Break special moves, Slashback parries and throw breaks. The cast was rebalanced again with new moves added, Kliff and Justice were removed, and all character voices were re-recorded. *Guilty Gear XX Accent Core Plus* followed in 2008, restoring the two previously cut characters and adding more game modes and features, and *Guilty Gear XX Accent Core Plus R* brought a close to the XX series in 2012 by rebalancing the cast again, with many new Force Break attacks added. "So far, the series'

visible complexity has steadily eased up with each game," says Ishiwatari. "I believe we can make more daring changes to the series in the future. Trying to add our own personal touch on top of that is also a challenge for the future."

**B**etween *Guilty Gear XX #Reload* and *Guilty Gear XX Slash*, the 2003 arcade release *Guilty Gear Isuka* took the existing characters and fighting mechanics and tried to make a four-player game out of them. While it looked nice and had a solid base to build from, it was a bit too much for many – with the adoption of a button to turn your character and *Fatal Fury*-style multiplane arenas, it was very chaotic. It received 6/10 scores from both *games™* and *Official PlayStation 2 Magazine*, with the latter declaring it a "honest stab at genuine change" that "dilutes what *Guilty Gear* does best".

The next major fighting game in the series was *Guilty Gear Xrd -Sign-*, and it brought about some enormous changes for the series. Visually, the biggest was the abandonment of

the beautiful existing 2D visuals for a cel-shaded 3D look. "At the time, I thought about continuing with a pixel art style, but *BlazBlue* was already handling that just fine, so we needed to come up with another approach," says Ishiwatari. "It was then a cel-shade one of the staff members had made themselves caught my eye, and I thought we could make that work." The team did just that, and then some – with the ability to do full 3D direction, character introductions and destroy move sequences look like they've been ripped straight from an anime movie. But the astonishing achievement was that you could mistake the game for a sprite-based game during the actual fights. By carefully managing the framerate of animations, Team Red created a convincing illusion of hand-drawn animation. No other 2D fighting game had transitioned to 3D in such a way, leaving the game with a unique look.

*Guilty Gear Xrd -Sign-* was developed with the intention of being more inviting to newcomers, ▶

**"I BELIEVE WE CAN MAKE MORE DARING CHANGES TO THE SERIES IN THE FUTURE"**

Daisuke Ishiwatari



### BRIDGET

DEBUT GUILTY GEAR XX

■ Despite a sweet appearance, Bridget is skilled in the art of yo-yo combat and works as a bounty hunter. Despite appearances to the contrary, Bridget is male.



### I-NO

DEBUT GUILTY GEAR XX

■ I-No is the first final boss of the series to debut as a regular character, and a constant source of chaos in the story. She's sadistic and loves her ever-present guitar.



### SLAYER

DEBUT GUILTY GEAR XX

■ This guy is a vampire who constantly puffs on his pipe. He fights unarmed and possesses exceptional skill, as well as knowledge that causes other fighters to seek him out.



### ZAPPA

DEBUT GUILTY GEAR XX

■ Zappa just wants to find love. Unfortunately, he's instead found himself the host of a vengeful spirit, which contorts him in painful-looking ways during fights.



### ORDER-SOL

DEBUT GUILTY GEAR XX

■ It's Sol Badguy again, but this time as a member of the Holy Order. His gameplay differs from the regular version, most notably by lacking a projectile attack.



» Zato-1 has been in *Guilty Gear* since the beginning.

» [PS4] While Burst is often a defensive technique, Faust has used it offensively to fill his Tension gauge here.



► while still retaining the series' signature feeling. "We're particular about presenting an open-minded atmosphere when you explore the game thoroughly," says Ishiwatari when asked about what he feels is crucial to the character of a *Guilty Gear* game. "That includes freedom and the parts that are called 'complex'. Subtle systems that aren't mentioned in the game manual. Where advanced players can achieve different results even if they play the same way. Elements where you get closer to victory by understanding and learning from that." Many of the later *Guilty Gear XX* mechanics such as Slashbacks and Force Breaks were removed, while older mechanics were improved, with expansions to the Roman Cancel and a new follow-up to Dust attacks. The new Blitz Shield gave an extra defensive option to repel most non-throw attacks and create an opening, at the cost of the Tension Gauge. The initial arcade

release of *Guilty Gear Xrd -Sign-* featured just 13 playable characters and a boss, 12 of whom returned from previous games, as the decision to switch to 3D graphics meant that even the existing characters needed to be created from the ground up. However, updates and DLC introduced in the console version brought the roster up to 17.

**G**uilty Gear *Xrd -Sign-* arrived in arcades in 2014 and received PS3, PS4 and PC ports.

The game has been developed further through major updates – 2016's *Guilty Gear Xrd -Revelator-* primarily added to the cast, with six extra characters including three newcomers. In 2017, *Guilty Gear Xrd Rev 2* added Answer and brought back Baiken, bringing the cast up to 25 fighters. The *Xrd* series has received universal acclaim, with the initial instalment receiving 9/10 scores from *Edge* and 93% from *Play*, with the

latter stating that "in terms of pure, raw style, there's nothing on PS4 that even comes close". *Revelator* and *Rev 2* received 9/10 from *games™*, while *Rev 2* scored 8/10 in *PlayStation Official Magazine*.

*Guilty Gear* survived an uneven start and has remained consistently popular for two decades, now firmly established as one of the premier fighting game franchises. "I believe it's thanks to its core players," responds Ishiwatari, when asked what has kept the series popular. "Because the players who continued pursuing our games at the time became our motivation, and convey the series' appeal." But as much as the players loved playing the games, Ishiwatari enjoyed making them. "Making games itself was fun early on in the series' development, and I'd work all the way through the middle of the night without care. I'd stay overnight at the company, and share work, food and games with the staff. Every day was like a field trip," he reminisces. "The memories of those days are the most important in my life."

The developers are taking a well-deserved look back at the series' history with the release of *Guilty Gear 20th Anniversary Edition* for Switch, which consists of the original *Guilty Gear* and *Guilty Gear Accent Core Plus R*. But the future is also

## "I'D STAY OVERNIGHT AND SHARE WORK, FOOD AND GAMES WITH THE STAFF"

Daisuke Ishiwatari



**ABA**

GUILTY GEAR ISUKA

■ An artificially created life form who spent many years in seclusion and fights with an enormous key known as Paracelsus. She crossed into the main series from *Isuka*.



**BEDMAN**

GUILTY GEAR XRD -SIGN-

■ Bizarrely, Bedman is a young man nailed into a combat-capable robotic bed. He is more or less permanently asleep, but is known to possess extraordinary intelligence.



**ELPHELT VALENTINE**

GUILTY GEAR XRD -SIGN-

■ Elphelt excels in the use of firearms – and thus ranged attacks. She has a major part of the storyline in the *Guilty Gear Xrd* series.



**LEO WHITEFANG**

GUILTY GEAR XRD -SIGN-

■ This prideful fighter is one of Ky Kiske's successors as King Of The Allied Kingdom Of Illyria, a position he shares. He can launch his enormous swords as projectiles.



**RAMLETHAL VALENTINE**

GUILTY GEAR XRD -SIGN-

■ Elphelt's sister is a final boss and originally a CPU-only fighter until a later update. She was created as an emotionless tool for her 'Mother'.





worth considering, and audience growth through the competitive scene is something Ishiwatari has clearly put a lot of thought into. "No matter how great the matches are, you won't attract attention without star players," he says. "Our challenge is to make something significant that will make people want to become star players for that game. That's something that doesn't stop with the game's content. Also, that doesn't just end with giving out large cash prizes at tournaments. Though of course, from an esports perspective, setting things up to assure star players' careers is also extremely important." But while audience growth is important, Ishiwatari's biggest concern for the *Guilty Gear* series is elsewhere. "What I'm personally most attentive of is the part where you can make a lot of friends through fighting games. And through internet society, that can lead to international culture exchanges. I hope that *Guilty Gear* can produce those kinds of cultural exchanges in the future." So if you're arriving to the series somewhat late, the message is clear: come for the yo-yo fighter and the oddball with the pool cue, stay for the people you battle with. \*

» [PS4] You'll need strong timing to pull off an air combo, but the upshot is that they're flashy as hell.



## GUILTY GLOSSARY

THERE'S A LOT TO MASTER IN GUILTY GEAR – HERE ARE THE MECHANICS THAT HAVE SHOWN UP IN THE GAMES OVER THE YEARS

### BLITZ SHIELD

This technique costs 25 per cent of your Tension, but deflects attacks and stuns the enemy, giving you the chance to attack.

### CLASH

When two attacks collide, a clash allows players to cancel the moves into other moves. This can trigger Danger Time.

### DANGER TIME

This grants both players 25 per cent free Tension and the chance to inflict a Mortal Counter after a three-second countdown.

### DEAD-ANGLE ATTACK

By pressing forward, punch and kick while stunned from blocking, you'll counterattack at the cost of half of your Tension gauge.

### DESTROY MOVE

Also known as the Ichigeki Hissatsu, these moves will win a match with a single hit. As you'd imagine, they're hard to pull off.

### FAULTLESS DEFENSE

Holding punch and kick expends Tension for a block that doesn't take chip damage and pushes the opponent back further.

### FORCE BREAK

These moves are powered-up versions of regular specials that cost Tension gauge to use, similar to EX moves in the *Street Fighter* series.

### MORTAL COUNTER

If you can land a strike during Danger Time, you'll deal enormous damage and stun your opponent, enabling follow-ups.



» [PS2] All the unique terminology surrounding *Guilty Gear* can make it a daunting series to get to grips with.

### NEGATIVE PENALTY

If you try to evade your opponent without launching any attacks of your own, the game will warn you once, then drain your Tension gauge!

### OVERDRIVE

These attacks are the standard super special moves of the series, which consume 50 per cent of the Tension gauge. Fighters usually have a few of them.

### PSYCH BURST

A utility technique that gives players a means of repelling foes mid-combo, as well as quickly filling the Tension gauge.

### ROMAN CANCEL

By hitting three attack buttons, a fighter can sacrifice 50 per cent of the Tension gauge to cancel a move's recovery.

### SLASHBACK

Hitting the two slash buttons together will perform this parry, but the timing is incredibly strict – you have to be within two frames of the attack hitting.



### SIN KISKE

GUILTY GEAR XRD -SIGN-

■ The son of Ky and Dizzy also appeared in *Guilty Gear 2*, and sees Sol as a father figure. His gameplay requires him to constantly eat during battle to fill an appetite gauge.



### JACK-O' VALENTINE

GUILTY GEAR XRD -REVELATOR-

■ This eccentric fighter is a servant of That Man, and veers rapidly between personalities. She fights by dropping generators that create minions.



### KUM HAEHYUN

GUILTY GEAR XRD -REVELATOR-

■ The veteran fighter you see externally is a robot – inside, the actual Haehyun is a young adult woman. The martial arts skills you see are all her own, though.



### RAVEN

GUILTY GEAR XRD -REVELATOR-

■ Raven is a recent addition to the playable cast who has appeared in story sequences for years. He fights using needles and magic.



### ANSWER

GUILTY GEAR XRD REV 2

■ Chipp's chief of staff learned his ninjutsu fighting style from his boss. He's businesslike in every regard, and seems to be permanently chatting on a phone.



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# T2: The Arcade Game

"IT ABSOLUTELY WILL NOT STOP. EVER. UNTIL YOU ARE DEAD"

» RETROREVIVAL



» MEGA DRIVE » 1993 » PROBE SOFTWARE

Lately, I've been seeing a lot of talk about the difficulty of *Sekiro: Shadows Die Twice*. Some people are calling it the hardest game they've ever played. You get a lot of that with any of those FromSoftware games – a little while back, you couldn't visit a gaming news site without seeing silly headlines like, 'The Brutal Challenge Of *Dark Souls* Cured My Addiction To Strawberry Milkshake!' To be fair, I do believe that these are the hardest games these people have played. But they don't know the primal fear that comes with the duty to protect one orange, rusty truck containing humanity's only hope of survival.

The third stage of *Terminator 2's* videogame adaptation is a stern enough test for two players, but with one player taking the aerial Hunter-Killers and another taking the T-800s on the ground, you can keep John Connor alive if you're quick to react to threats. My dad and I were a pretty well-drilled team back in the Nineties, and we survived to see later levels. But when nostalgia drove me to revisit the game years later, I went in for a solo mission. It seems to be literally impossible to take out every enemy, so you can only hope to do well enough to survive. You'll need a perfect memory of where enemies are going to appear, and even that might not be enough. Even now, hearing the music puts me on edge.

Friends online shared their tales of woe, from writing down enemy entry patterns to the drastic measure of buying a Game Genie. I mentioned the stage to Drew and he said, "Oh, the end of the game?" None of us seemed to share the same approach to dealing with this pain, but one thing united us all – our desire to inflict it on the *Sekiro* and *Dark Souls* generation. ✨





# THE MAKING OF

# ARMY MEN®

Army Men began with the simplest of twists, setting a game in the world of the iconic green, plastic toys. Bending genre expectations, it would go on to become one of the most enduring franchises in gaming history

Words by Hareth Al Bustani



In the late Nineties, with its focus entirely on software, The 3DO Company brought the iconic Army Men toy soldiers to life.

The result was an intense world, where soldiers break to pieces under hails of bullets and scream in agony, melting into piles of goo – everything sprinkled with just a hint of tongue-in-cheek satire.

It began in 1996, when Electronic Arts art designer Keith Bullen was hired by 3DO to art direct a project, vaguely titled *War Sports* – similar in spirit to the 3DO console's popular vehicular shooter, *Return Fire*.

However, it was to focus more on the squad deployment mechanics of the early Mega Drive RTS game, *Herzog Zwei*. Further adding to the brief, the marketing department wanted the game to land an 'E For Everyone' rating on the ERSB system, incidentally invented by 3DO's founder, Trip Hawkins.

Keith recalls, "I remember various marketing meetings when ideas like green blood and making the soldiers robots were brought up as ways to get the game a friendly rating. I didn't like any of these ideas." After months of brainstorming, Keith had a eureka moment. He thought back to his childhood, to the dirt pile behind his backyard. Images flooded back, him and his brother setting up little green soldiers and taking turns to throw rocks, trying to knock over each other's armies.

Miniature soldiers were among the oldest toys in existence, and

few had proven as enduring as the Army Men – unpainted plastic soldiers sold by the bucketload. From the iconic Louis Marx playsets of the Fifties to 1995's *Toy Story*, the toys remained a veritable rite of passage for kids. Keith would build his title around Army Men – a stroke of genius, adding enough charm and accessibility to draw in casual gamers, put off by the violence and machismo of typical war games.

Keith was soon made lead designer. "Once the soldiers became plastic, we had to come up with a universe with real terrains and plastic soldiers," he says "We wanted the world to feel serious to the Army Men characters' point of view but fun and nostalgic for the player."

Drawing upon his own experiences, Keith carefully studied the physicality of the toys, and how they interacted with their environments. "We paid close attention to the physics in the animations. It was very important to me that the plastic pieces reacted to the world as if they were made of the same light plastic as the original figures."

Despite the strong concept, the design process was not always a smooth one. Starting out as one of six developers on the *War Sports* project, Keith was now leading a team of ten – a number that would soon double as he was made creative director. "It was very challenging convincing the team to adopt my new gameplay ideas. Since this was my first game design, my vision



« [Mega Drive] Keith Bullen initially incorporated some of the more advanced strategic elements of the Mega Drive's *Herzog Zwei* into his design, before stripping them back.

“My vision was often challenged by other team members”

Keith Bullen

was often challenged by other team members who were satisfied with the previous direction of the product. It took several months to finally get everyone on board.”

One of the toughest sells of all was to the company's directors, and early attempts to pitch the plastic Army Men concept were shot down – dismissed as “too young”, and that “RTS fans would be turned off by ordering toys around”. The company was in a state of flux, and the staff was frequently playing a game of musical cubicles. While this annoyed

Keith at first, desperate to win over his detractors, he decided to use the environment to his advantage. “I positioned my computer screen so that it'd be seen by the most people passing by,” he remembers. “I then bought a 3D model of a generic Army Man and brought in some classic toy green and tan Army Men to use as pose references,” he says. “For several weeks, many people from every department in the company would stop to discuss the posed 3D model on my screen and we would talk about our experiences with Army Men, which would always lead to how cool it would be to play a game with green plastic Army Men. Soon after, the momentum switched from the product being perceived as too juvenile to being an awesome nostalgic experience.”

Asides from mirroring the physics of the real-life figurines, the game incorporated some of the toys' most iconic units – riflemen and bazooka bearers. However, it also provided an opportunity to take things to the next stage. “I really liked melting soldiers, and the way they would shatter into pieces when they were killed,” says Keith. “We destroyed many plastic Army Men in the 3DO parking lot for the sake of realistic plastic physics. I remember how excited I was when I first saw the flamethrower weapon burning a group of trees in the alpine and watching the fire spread to other trees. The enhanced fear of fire when you are made of plastic was a theme we relied on throughout the series.”

The story begins with a newsreel, which Keith calls “the most satirical element in the game”. In the clip, we see the totalitarian expansionist Tans prepare to engulf the Greens, who, in turn, begin to mobilise their



## IN THE KNOW

» PUBLISHER:  
THE 3DO COMPANY

» DEVELOPER:  
THE 3DO COMPANY

» RELEASED:  
1998

» PLATFORM:  
PC

» GENRE:  
TOP-DOWN ACTION

## GOING PORTABLE

### How Army Men fared on the Game Boy Color

Developed by Digital Eclipse in 2000, the Game Boy Color port of *Army Men* is a smooth adaptation. Featuring almost 30 missions, it boasts the core aspects of the original's *Ikari Warriors*-style action gameplay. Sarge has access to a similar arsenal of weapons: rifles, grenades, flamethrowers, mortars and bazookas, as well as tanks and jeeps. Though repeated shooting can be sore on the thumb, the game controls well, making the most of the platform's limitations. Of particular note is the sound quality, which ranks among the Game Boy Color's most impressive examples in the field – featuring voice acting, rocking explosions and a rousing, if somewhat limited, score.



# TRIP TALKINS



## The EA and 3DO Company founder talks Army Men

Trip Hawkins counts *Army Men* among 3DO's top three most meaningful brands, alongside *Heroes Of Might And Magic* and *High Heat Baseball*. "But only *Army Men* found 7 million paying customers," he beams.

The first game took the longest to complete, with the development team working hard to develop its look and feel,

along with Trip's favourite camera angle of the franchise. "It allowed the player to see more of the battlefield, develop strategies and then go into action. When the brand went very successfully to console formats, customers wanted more action and the camera came down close behind the lead character and it became a third-person shooter. Some of the lovely visual detail had to be sacrificed for the sake of speed and 3D immersion."

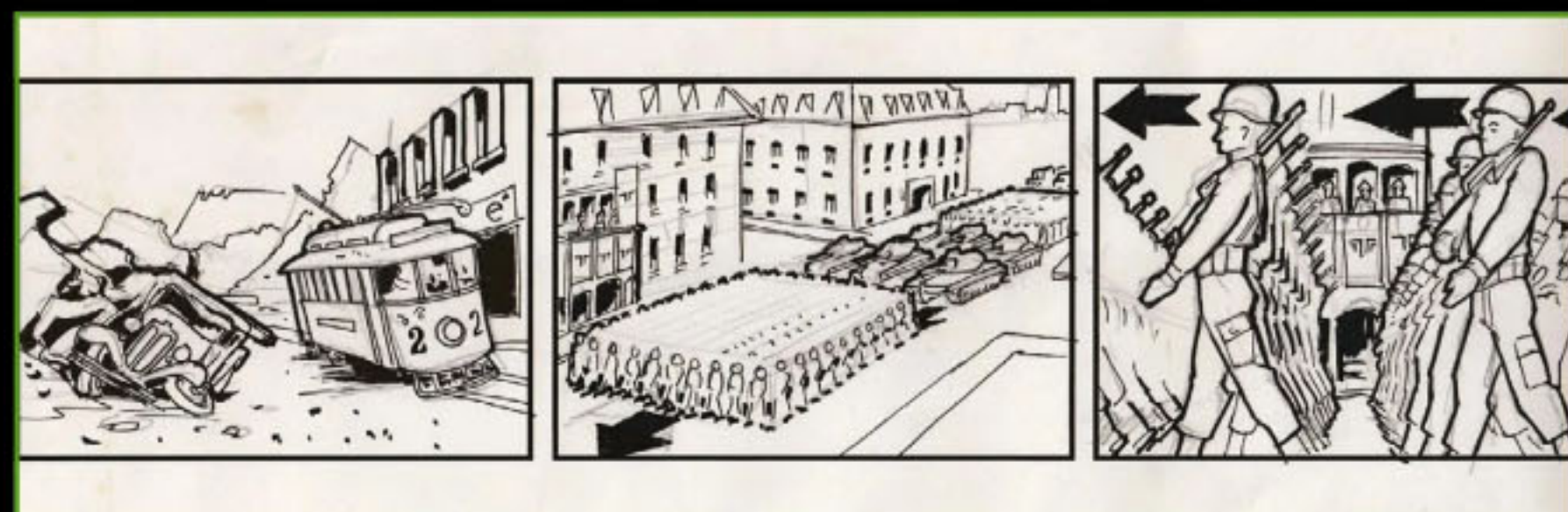
As an industry veteran, and a self-confessed "OCD perfectionist", the Electronic Arts and 3DO Company founder served a crucial role on *Army Men* – figuring out "where's the 'weenie'". "That's the visual and story element that the player is pursuing; hence, on Main Street in Disneyland, it's the Castle. There always needs to be an exciting goal that is obvious to the player, and you need one for every game level," Trip explains.

When it came to *Army Men*, the weenie was clear for Trip and his team. "It was such an obvious way to bring humour into an otherwise dark and violent subject, like warfare. I love humour in games and believe it is a key factor in the current success of *Fortnite*."

Moreover, Trip states: "Game mechanics can only have four elements: strategy, dexterity, skill and luck. I liked how *Army Men* had all four of these, in a good balance, especially on the PC. I do not like chess because it only really has strategy, plus the skill to memorise openings. If my friend is slightly better, the outcome is deterministic – he's always going to win. Later on, with *Sarge's Heroes*, I really loved the story and cinematics and it felt like an interactive movie. Solving puzzles and getting to the next cutscene was the weenie for me."

Trip argues that the *Army Men* brand was successful because it was not tied to a specific mechanic or product, but instead to a story – one that could span platforms and genres "and become a world".

"The highbrow critics dumped on the brand because they were outraged that it wasn't hardcore and that we dared to go outside one genre," Trip argues. "By that I mean *Madden* can only be an NFL simulation; *Warcraft* can only be an RPG, *Call Of Duty* can only be an FPS. I always knew that was silly. At that time, *Super Mario* was the only other pioneer brand thinking outside that box, but this approach was later accepted as a legitimate trend and methodology that we helped invent and establish."



» The game's setting is inspired by World War 2, with the Tans taking the place of the aggressive Axis.

► armies. "We watched many hours of authentic old reels before we came up with our version. The Tan leader gesturing like Mussolini was one of my favourite segments."

While *Army Men* began as a RTS, it soon incorporated a range of mechanics and influences. Players would control Sarge, a Green war hero. "I've always preferred arcade-like action games over strategy games," says Keith, "so I redesigned the game around the central character of Sarge, who the player would be able to control, as in games like *Ikari Warriors*."

At its core, it became a top-down shooter, with a set of objectives, ranging from rescue missions to robbing banks. As the game progressed, so too did its complexity. "Vehicles were a main feature in *Return Fire*, so we gave Sarge the ability to jump in and out vehicles like one of my favourite coin-op games, *Front Line*." Sarge could also call in air strikes, and even lead squads of Greens, bringing a touch of RTS back into the fold.

*Army Men* incorporated a range of movements, such as kneeling, lying down and rolling, to accommodate differing playstyles. "I introduced the duck-and-cover mechanic as a way to slow the gameplay down so that the users wouldn't charge through the levels, mowing down enemies. The gameplay became

more about tactics, rather than strategy," remembers Keith.

Once again, this idea was not popular with everyone. "Using different-sized objects as cover for different *Army Men* stances wasn't very popular with the programmers," says Keith. "It was going to be lots of work for a game feature that wasn't used in the popular games of the time. It took several months to get this mechanic right, but I think it worked well. My inspiration for this feature was the PC game *Crusader: No Remorse*."

Among the game's biggest fans, patrons and driving forces was 3DO's founder, Trip Hawkins, who was quick to embrace the *Army Men* concept. "Toy soldiers were my dominant play pattern as a child and I'd always invented strong storylines and adventures around them," he says. "Besides all the World War soldiers, I had Swoppets from the Wars Of The Roses, Roman centurions, and others – including cowboys, of course."



» [PC] Many an *Army Men* gave up their lives in the 3DO parking lot, in the service of creating the game's physics.



» *Army Men* features elaborate maps, densely packed with enemies, objectives and, most importantly, weapons.



» [PC] Whether your team is Tan, Green, Blue or Grey, fire is the common enemy that makes puddles of even the finest of soldiers.

"I've always loved casual military themes that combine strategy and action, so *Return Fire* was one of my favourites on the 3DO platform," Trip continues. "That game was really about destroying bigger targets like buildings, tanks and gun turrets, but I was inspired by the humorous way that useless and pointless ant-sized men would come out of burning buildings and try to run away, or even swim away from the island. It inspired me to do something more central with humour in the genre and a stronger narrative."

Rather than simply a means to securing a soft age rating, the plastic concept, Trip asserts, was a natural platform for the story, characters, narrative arc and humour. "We were focused on the US market, and were unaware that many European countries actually banned military toys, including toy soldiers, and wouldn't carry the *Army Men* games – nobody cared about them, because they'd not grown up with those toys."

Despite the softened edges, violence, he elaborates, is a "natural aspect of warfare", and "military realism" played a crucial role in the *Army Men* formula. "Creatively, we also wanted to have fun repeating some of the famous play patterns from childhood, since

most of us experimented with our toy soldiers by melting them, cutting them up, recombining parts in new ways and other things. As kids we were just playing and experimenting and they're just bits of plastic, but in our storyline it became irresistible, dark humour. It allowed us to cast our villains with a bit of sadism, that is still funny because," he pauses, "they're just toys."

Taking just a year to produce, even with the numerous restarts, once the team nailed the *Army Men* concept, Trip said it was destined for success. "This is what we live for in game development and publishing, to do something we really believe in and love, and to find a commercial audience that feels the same way about it."



### DEVELOPER HIGHLIGHTS

- KILLING TIME**  
SYSTEM: 3DO, PC, MAC  
YEAR: 1995
- ARMY MEN:**  
**TOYS IN SPACE** (PICTURED)  
SYSTEM: PC,  
GAME BOY COLOR  
YEAR: 1998
- ARMY MEN II**  
SYSTEM: PC,  
GAME BOY COLOR  
YEAR: 1999

After crossing three terrains – desert, alpine and bayou – Sarge ends the campaign by crossing over into the real world, a *Twilight Zone*-style ending, which fed directly into the sequel, *Army Men II*. The ensuing franchise would go on to sell

**“I’ve always loved casual military themes that combine strategy and action”**

Trip Hawkins

more than 7 million copies across every platform from the Dreamcast to mobile, generating \$300 million along the way – among the best-selling of all time.

Having laid the groundwork, Keith says he had no idea the title would be as popular as it was. "I never would have imagined that it would spawn 23 sequels and spin-offs," he says. Though he did not work on the sequels, instead moving the title to PlayStation with *Army Men 3D*, he believes the original was a true game-changer.

"I think *Army Men* was revolutionary in the way it crosses several game genres successfully. It's always been difficult to put a generic label on what class of game it is most like. Some of the reviews called it quirky or odd because of its unique game style. I considered these type of critiques a compliment. My goal was to create a game that I would want to play and not a clone of a game I had played before." ★



» [PC] In the bayou, Sarge infiltrates the Greys in an attempt to find one of three keys to an ancient portal.



» [PC] The story ends on a cliffhanger, *Twilight Zone*-style ending, with Sarge being lost in the real world.

Thanks to GOG for providing the games featured in this article.



## 3D Control Pad

» PLATFORM: SATURN » RELEASED: 1996 » COST: £24.99 (LAUNCH), £25+ (NOW, UNBOXED), £35+ (NOW, BOXED)

**S**ega's attempt to design an analogue controller for the Saturn barely resembles the controllers of today, and was quite different to many of its time. The main feature of this bulky, circular controller is an analogue thumb pad, which utilises a slightly raised concave disc instead of the now-traditional stick that you'd see with a PlayStation or Xbox controller. The controller also features a digital directional pad of the same type used on regular Saturn controllers and the six standard face buttons, as well as a switch to choose between analogue and digital modes to mitigate problems with older software that failed to recognise the new controller.

However, the 3D Control Pad (called the Sega Multi Controller in Japan) did prove to be influential. The controller was designed with a break-away cable, which patents show was in order to allow for additional sub-peripherals to be plugged in. Although this functionality was never utilised on the Saturn, the Dreamcast controller included two slots dedicated to sub-peripherals such as memory cards and microphones. That controller also owes its shape and layout to the 3D Control Pad, as well as its analogue triggers. These proved excellent for racing games and more, and were the one aspect of the 3D Control Pad that would become widely accepted within the videogames business. \*



### 3D Control Pad Fact

■ Many of the games supporting the Saturn's Arcade Racer controller also support the 3D Control Pad for analogue input, although it isn't supported to the same standard as games designed for it.

### ESSENTIAL GAME NIGHTS INTO DREAMS

The 3D Control Pad was introduced as part of a bundle with Sonic Team's spectacular score attack classic, as it was designed specifically to improve the experience with that game. Indeed, flying around as NiGHTS feels far smoother and more natural with analogue control when compared to the standard D-pad. Of course, the game itself is spectacular no matter what you play it with – it's an inventive game filled with great visual effects and strong replay value. If you have a taste for the unique, it stands as a cult classic that is well worth seeking out.



» It might look like an atrocity compared to today's controller designs but the 3D Control Pad was ergonomic and nice to hold.



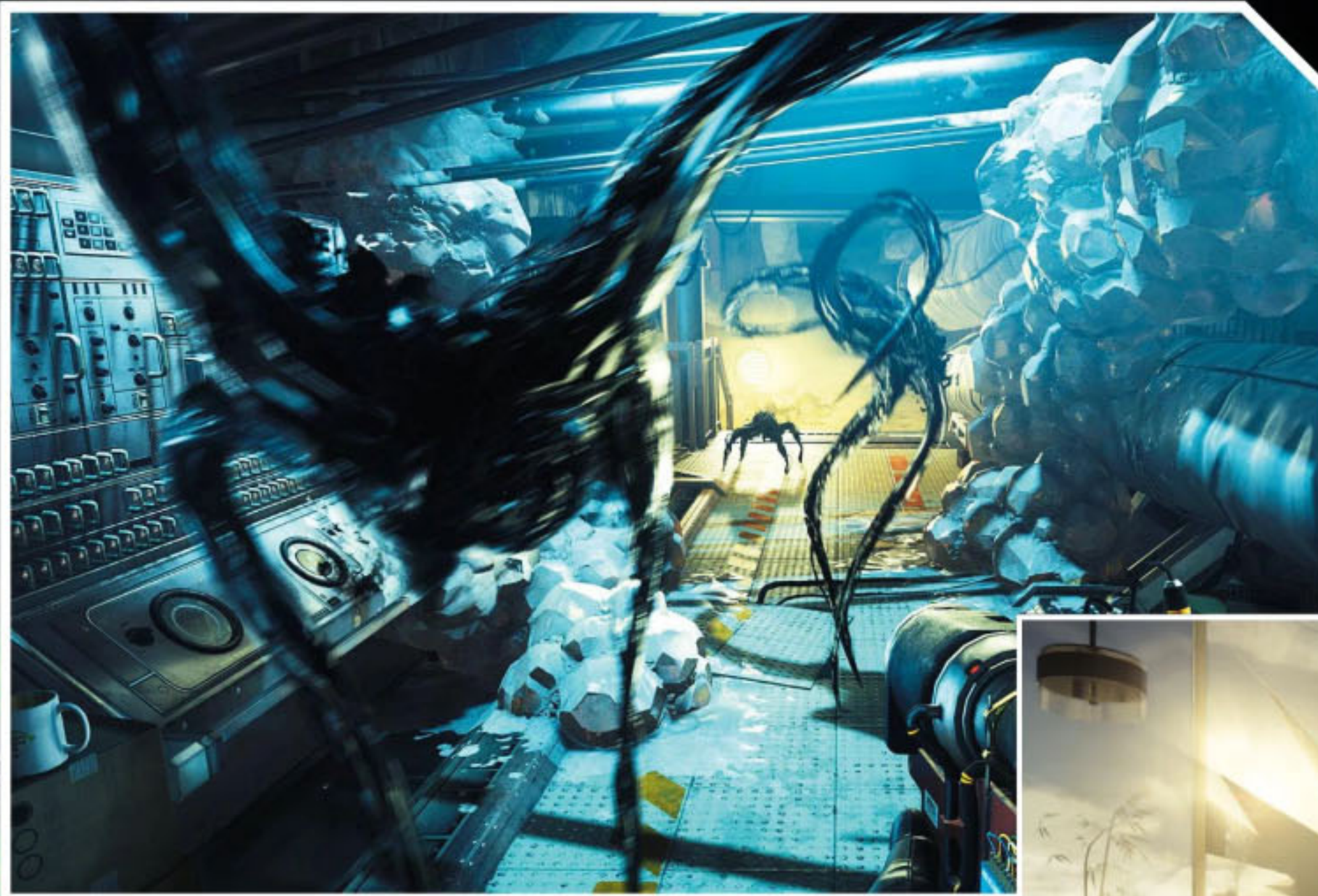


BLUFFER'S GUIDE TO

# IMMERSIVE SIMS

Warren Spector, Arkane's Ricardo Bare, and indie developer David Pittman draw on their combined experience to help us articulate what makes this unique and innovative genre stand apart from the crowd

Words by Paul Walker-Emig



» While 2017's *Prey* might technically be a reboot of the 2006 original, it bares little resemblance to its predecessor.



**D**uring the build up to the launch of *Prey* in 2017, Arkane Studios released a demo to give the world a taste of its latest immersive sim. As you might expect, certain areas were locked off. However, one intrepid player managed to circumvent the restrictions Arkane had put in place, a 'mistake' that nicely encapsulates what makes the immersive sim such a compelling genre.

"A player figured out they could break the glass of a window, looking into an office – the door was locked, but the inside of the office has a button you can hit to open the door," Ricardo Bare, a lead designer at Arkane who got his start working on *Deus Ex*, explains. "Someone figured they could squirt a ball of glue into the office [using the game's glue gun], take the dart gun, which shoots Nerf-like foam bullets, and bank it off the glue ball, back into the door, and hit the button. It was a genius use of the systems we put in the game."

This interplay of systems, rules and tools – in this case, the physics that makes the dart bounce, the logical implementation of the rule that all doors can be unlocked from the inside, and the glue and dart guns – is at the heart of the immersive sim. In the words of Warren Spector, an originator of the genre who worked on *Ultima Underworld: The Stygian Abyss*, *System Shock* and *Deus Ex*, these kinds of unexpected consequences that emerge from an immersive sim's systems is an example of how the genre makes the player into an 'author'.

"Games are a collaboration between developer and player," explains Warren. "And the more

» [PC] Alien mimics that can turn into almost any object to dupe you are a terrifying nuisance in the early stages of *Prey*.

» [PC] *Prey* kicks off with a sequence that completely subverts your expectations.

collaboration you allow, the cooler I think a game is. Puzzle games and shooters and cinematic games, while wonderful in their way, are still about how clever and creative the designer is or, simply, how skilled the player is. Immersive sims are different – they are about how clever and creative the player is. Immersive sims make authors of us all.

"An immersive sim is, at its heart, a game that removes as many barriers as possible between the player and belief that they're actually in the world of the game," Warren continues. "Immersive sims are characterised by the interaction of internally consistent systems to simulate the ways in which the world works, rather than the approach taken by some other types of games that rely heavily on scripting."

The history of the genre is usually traced back to 1992's *Ultima Underworld: The Stygian Abyss*. The game featured a host of systems that have come to be associated with the genre – the ability to shape your character's skills, simulation of real-world elements through physics and encumbrance systems, nonlinear progression, and NPC AI with different factional allegiances.



## TIMELINE

From *Ultima Underworld* to *Prey*, we highlight key games in the genre

The game credited as being the first immersive sim, *Ultima Underworld: The Stygian Abyss*, is released.

1992

Looking Glass Studios, which is synonymous with immersive sims, releases the influential *System Shock*.

1994

# FIVE TO PLAY

Essential immersive sims you shouldn't ignore

## System Shock 2

■ A mainstay in 'greatest games of all time' lists, and a game that's frequently cited as a highly influential title that was ahead of its time, *System Shock 2* has gained legendary status. The game blends first-person shooting, survival horror and RPG elements. Its complex and rewarding gameplay systems are backed by a haunting atmosphere.

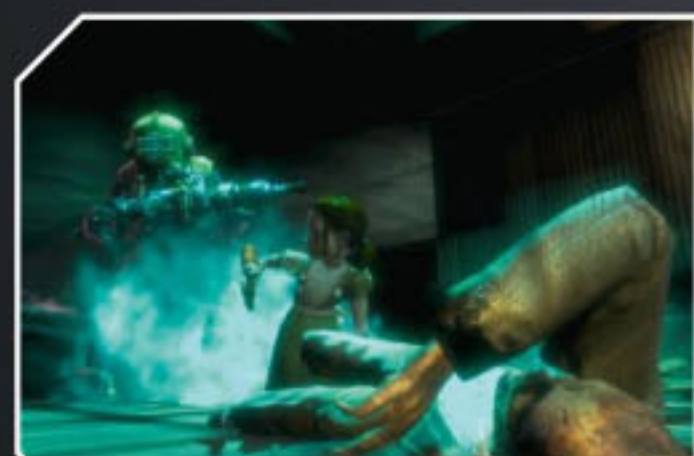


## Thief II: The Metal Age

■ The sequel to *Thief* is a refinement of the innovative stealth systems introduced in the first game that focuses in on what was good about the first game – the incredible sound design and intricate levels – and tidies up its weaker elements – removing the maligned zombie-based levels, for example. It makes a strong case for the title of best game in the entire *Thief* series.

## Deus Ex

■ The new *Deus Ex* games are a great gateway into the sci-fi series for an immersive sim newcomer, but we would still recommend returning to the original to find out first-hand why this game's reputation endures. *Deus Ex*'s sense of freedom, expressed through its adaptability to your choices, was revolutionary at the time and can still be surprising to modern eyes.



## BioShock

■ A spiritual successor to *System Shock*. Featuring one of the most iconic locations in gaming with the underwater 'utopia' of Rapture, one of its most iconic enemies in the diver-suited Big Daddy, and one of the medium's most-talked-about twists, there are plenty of reasons why you should be playing *BioShock* outside of its importance as the first mainstream immersive sim hit.

## Dishonored 2

■ If you want to see where the immersive sim is at today, you should look no further than the games being put out by Arkane Studios, *Dishonored 2* being one of its recent titles. Each level is packed with possibility – open windows spotted on balconies, clues overheard in nearby conversations, tempting opportunists to use your upgraded supernatural powers and much more.



■ [PC] *Ultima Underworld* is one of the first immersive sims, and paved the way for the likes of *Thief* and *Dishonored*.

► *Underworld* was also notable for its implementation of 3D technology, using the first-person perspective now associated with the immersive sim. "*Underworld* was certainly one of the first – and, as far as I know, it was the first immersive sim to adopt the first-person perspective that's such an important contributor to immersing players in an alternate reality," says Warren. "I say *Underworld* was 'one of the first' because I've always felt like the *Ultima* games kind of paved the way for the genre. I guess you could say *Ultima* opened the door and *Underworld* walked right through it."

**U**ltima *Underworld*'s developer and publisher, Blue Sky Productions and Origin Systems, were incubators for a host of talented developers whose careers are intimately linked to the history of the genre. The first post-*Underworld* stage of this history was the formation of Looking Glass Studios, where Blue Sky and Origin alumni Warren Spector, Doug Church, Paul Neurath and Edward Lerner would go on to develop the legendary *System Shock*, released in 1994.

The game took the ideas developed in *Ultima Underworld* and applied them to a science fiction setting, putting you aboard a space station that



■ [PC] The *Ultima Underworld* series still endures to this day, the latest game, *Underworld Ascendant*, came out in 2018.

Looking Glass Studios continues to innovate with the stealth-themed immersive sim, *Thief: The Dark Project*.

A young Ken Levine cuts his teeth as a designer on the highly influential sci-fi classic, *System Shock 2*.

The sequel to *Thief* and the release of the first *Deus Ex* makes this a fantastic year for immersive sim fans.

Cult favourite *Deus Ex: Invisible War* excites gamers. As well as PC, it is also released on Microsoft's Xbox.

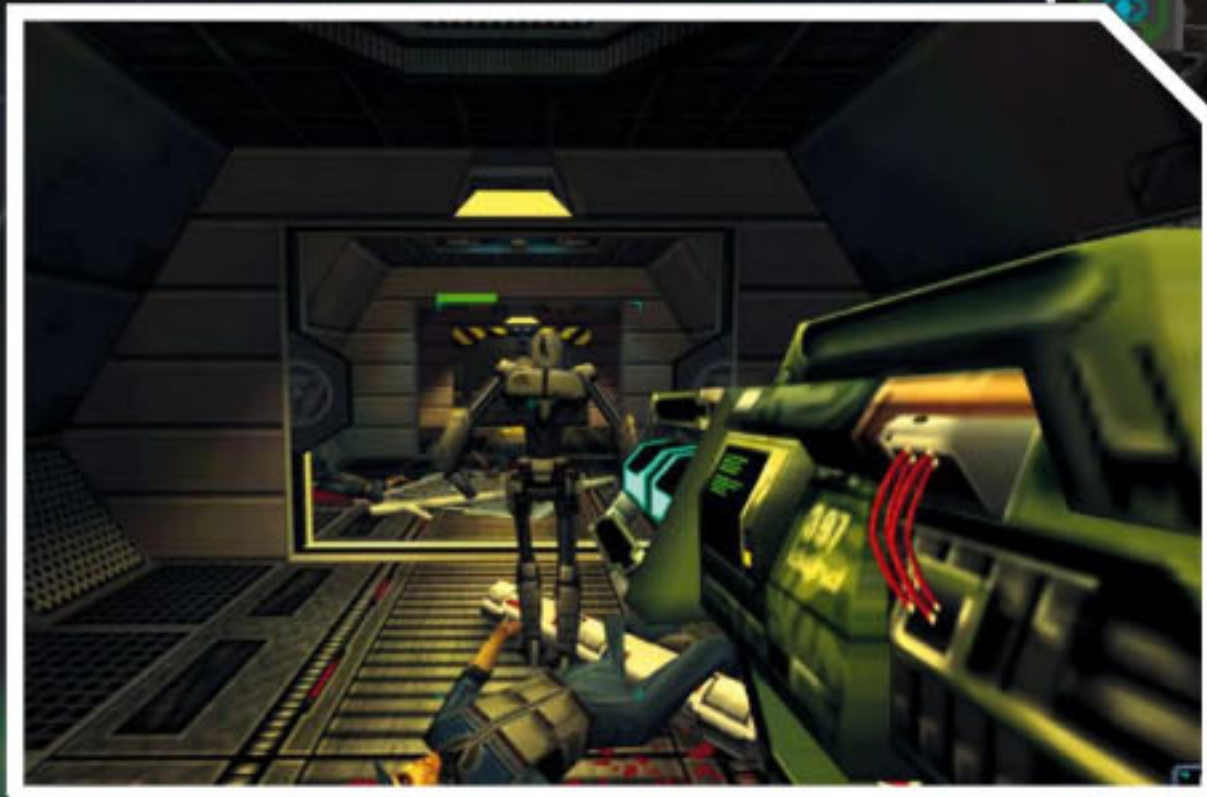
1998

1999

2000

2003

» [PC] *System Shock* is a classic immersive sim, introducing us to the malevolent AI SHODAN.



» [PC] Psychic powers were one of the options available to you in defining your character in *System Shock 2*.



has been taken over by a malicious AI called SHODAN. Warren, Paul and many of their colleagues have since acknowledged that the game was too complex in some aspects, and it was not a success commercially. However, the game's evolution of emergent, nonlinear gameplay and its approach to storytelling was incredibly influential – you'll recognise many of its features in modern games, including different ammo types, hacking and the use of in-game items to tell the game's story. *System Shock 2*, released in 1999, arguably had an even bigger impact, refining the systems implemented in the first game and bringing a stronger RPG focus through its upgradeable skill system, which allowed you to customise the game experience to your playstyle.

In between the release of *System Shock* and *System Shock 2*, Looking Glass released another defining title in the form of 1998's *Thief: The Dark Project*. "I was hooked by the slow simmering tension of its stealth mechanics," says David Pittman, who has experience working on immersive sims through *BioShock 2* and his indie titles *Eldritch* and *Neon Struct*, on his first experience with *Thief*. "It demanded my full attention, to listen for footsteps around corners, to watch whether I was stepping on carpet or tile, to scope out rooms for dark corners to hide in. And the level design was remarkable; it felt more like a real, believable space than anything I had seen in a first-person shooter."

“We think of levels as jungle gyms or playgrounds that provide open-ended and loosely structured experiences”

Ricardo Bare

*The Dark Project*, and its sequels – 2000's *The Metal Age* and 2004's *Deadly Shadows* – demonstrate how the principles of the immersive sim can be applied in different ways. While the genre is often associated with allowing the player to approach challenges in different ways, *Thief* is focused on providing a pure stealth experience. However, its emergent design and intricate level design maintain the sense of freedom at the heart of the genre. Ricardo describes the philosophy aptly in explaining his own studio's approach to level design.

"One approach to level design is a rollercoaster ride experience where there isn't a lot of variation between one player's experience and another," he says. "That's a valid way to make a game, but that's different to what we would do at Arkane. We think of levels as jungle gyms or playgrounds that provide open-ended and loosely structured experiences. You still have an entry point and end goal, but how you get there might vary. We design spaces to have lots of different routes, different elevations and challenges."



» [PC] The *Deus Ex* games blended player agency and cyberpunk themes along with first-person action.

The groundwork for the genre done at Looking Glass through *Ultima Underworld*, *System Shock* and *Thief*, was built on elsewhere. A number of Looking Glass alumni, including Warren, splintered off to form Ion Storm where another vital part of the immersive sim story would be told. Here, *Deus Ex* was developed and released in 2000.

"I wanted to do something set in the real world," says Warren on the genesis of *Deus Ex*. "I even called the earliest iterations of the design

The *Elder Scrolls* series takes a leaf out of the immersive sim playbook with *The Elder Scrolls IV: Oblivion*.

The first game in the *Stalker* series comes out of Ukraine, and Ken Levine returns to his *System Shock* roots with *BioShock*.

While not reaching the depths of the original, *BioShock 2* still proved popular with gamers.

The legendary *Deus Ex* series returns to a largely positive reception with *Deus Ex: Human Revolution*.

2006

2007

2010

2011

# WHAT MAKES A GREAT IMMERSIVE SIM?



■ **Agency** Immersive sims put the power in your hands, allowing you to approach objectives in a variety of ways and find creative solutions to the challenges you face.

■ **Nonlinear levels** A good immersive sim will be compelling to explore, offering multiple routes that require different kinds of approaches.

■ **Emergent moments** Immersive sims are built around the interaction of consistent systems. These systems should combine to create unique, surprising moments that could never have been scripted.

■ **Defining yourself** As a general rule, immersive sims should offer some way for you to define who your character is through the choices that they make and/or the skills that they possess.

■ **Immersive location** Feeling like you're part of a real world with a compelling atmosphere is a key part of the 'immersive' part of immersive sim.

“I think the team had a commitment to putting power in players' hands”

Warren Spector



Warren Spector is one of the fathers of the immersive sim genre, and is still making them to this day.

► ‘the real-world roleplaying game’. It started out in the mid-Nineties as *Shooter*, a modern day immersive sim, but it quickly became apparent that recreating the real world would be too tough in the context of a game designed so players could apply logic to the functioning of things in the game world – I mean, players have expectations about how telephones work, for crying out loud, and we couldn't even simulate that. So, the game had to be set in the near future, when we could not thwart player expectations every time they tried to do something. I vowed I'd make a game where you could sneak or fight your way past any problem in the game,” Warren continues. “*Deus Ex* was the result”.

The game offered a tapestry of possibility built around skills including lockpicking, shooting, stealth and hacking. It was also mind-blowingly adaptable to the choices you made – you could often ignore the instructions other characters gave you to find your own path. *Deus Ex* took its predecessors' commitment to player freedom to a new limit, to the extent that it still feels unusually open in a modern day context where we are far more familiar with games that let you approach challenges in different ways.

“Honestly, it amazes me that people still care so deeply about *Deus Ex* 20 years after its release,” says Warren, reflecting on the game's enduring

reputation. “I think the team had a commitment to putting power in players' hands to craft unique experiences and a real love of emergent gameplay. We created problems, not puzzles, and forced ourselves to get ‘off the stage’ so players could take the starring role. We created a world you could reason with – one where you could apply real-world logic to in-game problems.”

Warren was not the only ex-Looking Glass employee to continue the legacy of the immersive sim elsewhere. Ken Levine, who worked on *System Shock 2* and *Thief*, is now best known as the director of *System Shock* spiritual successor *BioShock*. The game took many cues from its source material – the ability to customise your skillets by injecting yourself with ability-enhancing Plasmids and a research system that netted you bonus damage to enemies and unlocked new abilities are both ideas that appear in *System Shock 2*, in different forms. However, the game made a huge leap forward when it comes to the ‘immersive’ part of immersive sim. Improvements in technology and a talent for environmental storytelling allowed developer Irrational to build an iconic underwater dystopia in the form of Rapture. This place, where the moans of shunting Big Daddies echo in the dilapidated grandeur of architect Andrew Ryan's fallen paradise, has a coherent sense of reality lacking in the worlds of



*Dishonored* does for *Thief* what *BioShock* did for *System Shock*, offering a fantastic modern interpretation of a classic series.

*Gone Home* showcases an immersive sim-inspired storytelling approach and *BioShock Infinite* is released.

Two series that serve as standard bearers for the genre return in *Dishonored 2* and *Deus Ex: Mankind Divided*.

Arkane shows it isn't a one-trick pony by following up on *Dishonored 2* with a resurrection of *Prey*.

2012

2013

2016

2017

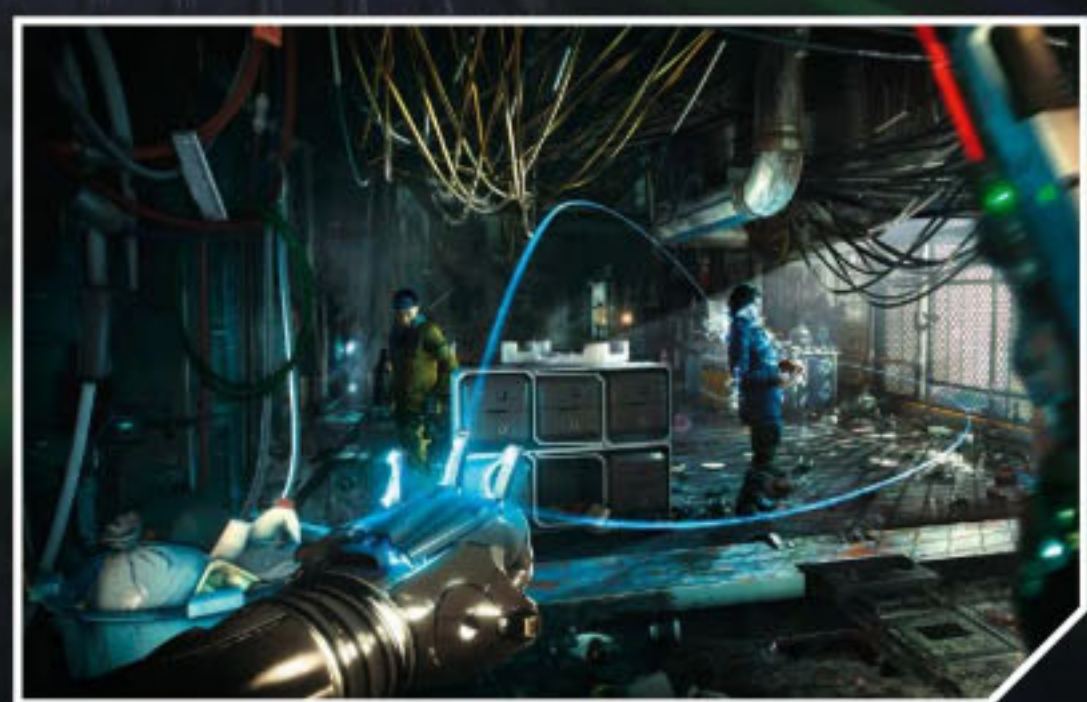
its predecessors. This was a big part of why the 2007 mega-hit was able to take a cult genre to the eyes of a far larger audience. That, and its balance of complexity and accessibility.

"Immersive sims typically are complex and complexity does not always equal good for the player experience," Ricardo reflects. "You can have simple rules, and few of them, and have a very deep game; it would be a mistake to conflate complexity and depth."

*BioShock* does not make this mistake. "It feels obvious in retrospect, but one of the biggest lessons I took away from the development of *BioShock 2* was how much sheer work it takes to support open-ended player toolsets," says David on the difficulty of making complex emergent moments work naturally. "As a young player, I had naively expected that immersive simulations were easier to make than other games, because the rules of the simulation would make complex interactions just work. In practice, that's rarely the case. For the best results, and to minimise bugs, the sim has to be carefully controlled in each scenario. If it is done well, no one even notices — the player perceives a consistent world, not the invisible hand of the designer."

**A**long with the success of *BioShock* and its sequels — *BioShock 2* in 2010 and *BioShock Infinite* in 2013 — the *Deus Ex* series made a return from the hibernation it had been in since 2003. 2011's *Deus Ex: Human Revolution* and 2016's *Deus Ex: Mankind Divided* offer a brilliant modernisation of the mechanics explored in the first two *Deus Ex* games. The scope of possibility is narrowed in some ways, but that pays off in a more robust implementation of the systems that are there to play with. The game's semi-open-world areas are far smaller than in many contemporary titles, but they are packed with options, making them richer to explore than games five times their size.

Perhaps the studio now most closely associated with immersive sim games is Arkane. Ricardo is not the only *Deus Ex* alumni there: co-creative director, Harvey Smith also worked on *Deus Ex*, and *System Shock*. Just as Irrational offered a modern take on *System Shock* with *BioShock*, Arkane did the same with *Thief* in its 2012 title *Dishonored* and 2016 follow-up *Dishonored 2*, before moving to a setting reminiscent of *System Shock* with 2017's *Prey*. The two games



» [PC] One of the potential tools added to your arsenal in *Deus Ex: Mankind Divided* is the ability to hack tech from a distance.



## Q&A RICARDO BARE

The lead designer at Arkane Studios talks us through the genre



**What does the term 'immersive sim' mean to you?**

I don't think there is one canon definition, but there is a list of overlapping attributes that typically show up. Typically, the immersive component refers to things like being in first-person. It means that there are features in the game that make you feel like you're in that body — I can look down and see my feet, or the way the camera moves, or having mobility features, like being able to climb over ledges. Feeling incarnated in that space and having the world feed back to me, in a consistent way, that I am there.

The second part is the simulation part. Typically, our approach is to design mechanics that are not one-off or special case, but live in a system together that the player can observe and interact with, in a way that allows players to improvise and make plans. What that means is that you often get gameplay that is expansive and sometimes unpredictable, because players can use those rules to invent their own ways to play the game or approach problems or situations. The classic example we always cite is on *Deus Ex*, we created a mine that you could attach to walls and we said the mine has physics. When you combine that with the rule that players can climb over any physics object, well, then you've created a way for players to make improvised ladders, even though we did not intentionally design that up-front.

**Having had many staff members that worked at Looking Glass Studios back in the day, is**

**Arkane conscious of that legacy?**

We are definitely conscious of it. We are conscious of the fact there is a hardcore fanbase out there who is very interested in what we are doing and have expectations and we have similar expectations — that is always playing on us. At the same time, things change. *Deus Ex* came out almost 20 years ago now and I think players, their fluency with videogames, is different now. It's increased, so people have different expectations. Even though we stay true to those values I talked about, we also look for new ways to express them. *Prey: Mooncrash* is a good example. What we did there is say, 'Let's do a genre-bending exploration where we meld roguelike mechanics with an immersive sim backbone.' We're always eager to do things like that.

**Are there any unique challenges in developing immersive sims?**

Trying to teach the players the richness that is in a game that has lots of player choice and lots of simulation is challenging, because what do you select to show the player? You almost have to give them a sample set of the broader range of possibilities, while at the same time not mistakenly teaching them that the sample that you show them is the only way to do it. [...] You think you're like, 'Here's one way you can do something,' and players internalise that as, 'The way I'm supposed to do it.' That's a challenge.

# THE SECRET CODE

We reveal a unique Easter egg that spans an entire genre

If you were to play through the first section of every immersive sim in succession, you might notice a pattern. In *System Shock*, the code for the first door is 451. In *System Shock 2*, it's 451000. In *Deus Ex*, you can open the van at UNATCO headquarters with the code 0451. The code for the first safe in *Dishonored* is 451, it is 0451 for the first locked door in *BioShock*, and the drawer of a filing cabinet in *Gone Home*. As you might have guessed, this isn't a coincidence. *System Shock* first used the code as a reference to Ray Bradbury's novel, *Fahrenheit 451*, and the many immersive sim games that followed have continued the tradition.



» [PC] The Big Daddies in *BioShock* will not attack you as long as you keep your distance from the Little Sister they are protecting.

“**Dishonored started largely as Thief-inspired exploration**”

Ricardo Bare

► show how the principles of the immersive sim can be applied in very different ways, creating different experiences for the player, despite sharing the same design philosophy.

“I think part of it is where they started and where they are going,” Ricardo says. “*Dishonored* started largely as *Thief*-inspired exploration. You’re talking about a game where stealth

and assassination-type moves have a greater emphasis. Where *Prey* started more like *System Shock* where the emphasis is less on stealth and more on a broader range of player approaches. Setting-wise, *Dishonored* is more like a travelogue and *Prey* is a single-location experience, and if you take those two starting points – [*Dishonored*] being more of a travelogue stealth experience and *Prey* a kitchen-sink experience in one location – while they are both immersive sims, it produces two very distinct experiences.”

**D**istinct experiences, indeed, but compelling in their own ways. *Dishonored* presents you with a delectable smorgasbord of powers that can be combined in creative ways. It’s also notable for a fantastic teleportation mechanic called Blink – a wonderful tool for prodding at different routes and possibilities within *Dishonored*’s multilayered sandbox levels. *Prey*, on the other hand, feels more akin to a *Metroidvania*, in which you criss-cross an alien-infested space station as you uncover the twists and turns of its mysterious story.

The lineage of the immersive sim that stretches back through *Dishonored*, *BioShock* and *Deus Ex* to the early Looking Glass games is a key part of the story of the genre, but it’s not the only one.

“I’ve noticed a tendency to define immersive sims as only games belonging to the Looking Glass Studios lineage,” says David. “I’ve tried to find a more inclusive definition. To me, there’s no reason *Far Cry*, *Stalker*, or an *Elder Scrolls* shouldn’t also be considered immersive sims.”

Indeed, *The Elder Scrolls IV: Oblivion* is often cited as the point at which the series shifted from a foundation of stats and random rolls towards something that resembles an immersive sim,



offering you the ability to customise your character and direct the skills you acquire the challenges you face to produce different outcomes.

*Stalker* kicked off in 2007 with *Shadow Of Chernobyl*, followed in 2008 by *Clear Sky* and 2009 by *Call Of Pripjat*. The games are a brutal simulation of survival in a post-apocalyptic landscape – equipment will be damaged as you use it, you must eat to offset your avatar's hunger and you need medical supplies to deal with bleeding if you get injured.

You might recognise weapon degradation and medical self-care from another title: *Far Cry 2*. That game is certainly the most immersive sim-like in the series, but there's an argument to be made that all *Far Cry* games follow that tradition. After all, those emergent system-based gameplay moments, where a wild animal comes barrelling out of the forest into the heat of a conflict after you accidentally started a fire that spread into the jungle, are what have made the series famous.

Cult classic *Vampire: The Masquerade – Bloodlines* is another title that deserves a mention. Though it suffered from bugs, the game won a dedicated fanbase thanks to its commitment to freedom. It featured an intricate dialogue system that responded to your reputation among other vampire clans in the game and allowed you to manipulate NPCs to your will. Objectives could be completed in both violent and nonviolent ways.

There are plenty of games that push at the boundaries of what we might call, immersive sims, too. While David describes his most recent immersive sim, *Neon Struct*, as a "homage to *Thief*", his previous game pushes the genre in a different direction. "*Eldritch* was my attempt to marry the stealth, combat [and] powers of *Deus Ex* or *Dishonored* with the randomised challenge of roguelike games. With its small inventory (up to two weapons and one power at a time) and frequent deaths, I intended it to encourage players to experiment with different loadouts, instead of feeling locked into one skill path."

*Gone Home* is another indie title that hints at how the idea of the immersive sim can be applied in different ways. There are no enemies, no failure states, and no role-playing stats system. However, this game about exploring a family home to find out what happened there presents a believable virtual space that allows you to interact with objects in a way that simulates the experience of being in a real place.



» David Pittman is an indie developer who has worked on the likes of the *BioShock* and *XCOM* series.



» [PC] David tells us *Neon Struct* pays tribute to immersive sims like *Thief: The Dark Project*.

» [PC] Dialogue systems that adapt to your character and choices to reveal different possibilities have long been a part of the immersive sim genre.



» [PC] Cover guards in rats, teleport behind them or go invisible? *Dishonored* lets you do it all, and more.

Nevertheless, we wonder whether the genre remains underexplored today. After all, Arkane is one of the few studios out there making what we would classically refer to as immersive sims. Ricardo argues that the reality is a lot more complex. "I would say it has been really well explored. It just hasn't been explored in the way you might expect. The way that people have been exploring immersive sims is through the values of immersive sims. Most open world games now have RPG-lite mechanics and multiple approaches to obstacles and problems. A lot of games now borrow very open-ended structuring of player abilities, and even layout and level design. If you look at *Breath Of The Wild*, it's an interesting departure from other *Zelda* games because of the way that they let you freely sandbox the open world and use all the abilities that Link gets. The way you can use those improvisationally is fantastic and, they probably wouldn't talk about their game in those terms [as an immersive sim], but you can see an analogous design philosophy there: give the player a bunch of consistent interesting powers and let them use them in way that they want to." \*



## IN THE KNOW

- » **PUBLISHER:**  
THREE FIELDS ENTERTAINMENT
- » **DEVELOPER:**  
THREE FIELDS ENTERTAINMENT
- » **RELEASED:**  
2019
- » **PLATFORM:**  
PC, PS4, XBOX ONE
- » **GENRE:**  
RACING



» [PS4] Blue skies, colourful cars, crazy drifts... yep, this is a good old-fashioned arcade racer alright.



The Burnout series may have screeched to a halt, but its legacy lives on in this shiny new racer from some of the visionaries behind the classic franchise. Alex Ward explains why it's better to Burnout than to fade away

Words by Luke Albigés

**C**onsidering the immense popularity and resounding critical acclaim the *Burnout* series had in its heyday, its sudden disappearance from the arcade racing scene after 2008's *Burnout Paradise* was all the more surprising. Criterion was producing back-to-back hits, following the arcade purity of *Burnout 2* with *Burnout 3: Takedown's* new-found focus on aggressive driving, *Burnout Revenge* took the vehicular carnage even further, then *Burnout Paradise* shifted the series to a sandbox setting with great results in early 2008. But since then, fans of riotous road rebellion have been left starved of rivals to take down and boost bars to drain with reckless abandon. The team shifted gear and picked up the *Need For Speed* franchise for several years, and while there were elements of classic *Burnout*

gameplay present in Criterion's two entries in the series, its just wasn't the same.

Fast-forward almost a decade and we can finally hear the familiar sounds of supercar engines roaring, metal scraping on metal and millions of pounds' worth of vehicles being written off in a deafening cacophony once more. But *Dangerous Driving* isn't just a pretender to *Burnout's* throne – it's the long-awaited return to the genre from some of the key creatives behind the *Burnout* series, and you'd almost have to be blind to miss the similarities. Founded by ex-Criterion bigwigs Alex Ward and Fiona Sperry, Three Fields Entertainment has spent the last few years building up to this release, honing its craft and getting the stage ready to deliver a true spiritual successor to the *Burnout* legacy.

"Our goal with the game is to bring back a style of game and a genre that has disappeared for a long time," Alex explains. "The other games I directed in my career are all very personal to me. I was the person who started the whole thing off back in 1999. So capturing a sense of nostalgia is important, but more important to us is taking that whole feeling, revitalising it and take it to a new place." Alex goes on to explain how Three Fields' previous releases helped pave the road for *Dangerous Driving*. "We learned physics in *Dangerous Golf*, speed of iteration in *Lethal VR*, then we made physically based cars crash in *Danger Zone* indoors, then took all of that outside and made *Danger Zone 2*. We say that each



» [PS4] Pursuit mode is a homage to *Chase HQ*, with criminal cars needing a good few shunts before they're vulnerable.





» [PS4] Vehicle wrecks persist between laps, so you need to be aware of where you go in for takedowns.



» [PS4] The Formula DD car is the ultimate test of skill – it's insanely fast and twitchy, requiring lightning reflexes to keep in one piece.

game is a stepping stone to the next. If you follow our progress, each game gets bigger and better."

*Dangerous Driving* has everything you'd expect from a game cast from *Burnout's* mould. There's a host of familiar modes (as well as a few new ones) with those ever-satisfying takedowns returning, aftertouch is there for when you need to take a rival down with you, and the sense of speed is phenomenal. This is one aspect in which *DD* is able to overtake its predecessors, with modern technology allowing races to screech along at the kind of eye-searing pace that simply wouldn't have been possible on older hardware. Fans of the *Burnout* series will pick up on a lot of similarities from across various titles, but it certainly feels skewed towards channelling the earlier games in the series, even down to the presentation style. "I think we started off trying to make something along with lines of the 2002 title," Alex muses. "We would have done traffic checking... but we'd just spent the previous seven months doing that in *Danger Zone 2*, so we left that out. The broad mission statement was to make a true 'in the zone' arcade racing game. And I think we did that."

*Burnout's* DNA is clearly spliced into two of the team's new launches, with *Dangerous Driving* bringing the racing action while *Danger Zone* and its sequel scratch that Crash mode itch. The physical version of *DD* even comes bundled with *Danger Zone 2* to offer that full *Burnout*-style experience across all disciplines, a smart solution and one that overcomes some of the limitations of having less resources to work with than would have been thrown at a triple-A release. "The main differences are far fewer people, far far less budget and much less time to spend on development," Alex explains when asked about the trials and tribulations of recapturing the *Burnout* magic as a small indie studio.



» [PS4] Stringing together takedowns will fill and extend your boost gauge, which is great for putting a bit of distance between yourself and the pack.

"We did the project in seven months for three platforms at once with just seven people. We spent under one per cent of the budget of the last *Burnout* title. The benefits are we use far superior technology and tools than we ever had back at Criterion. We use Unreal Engine and Epic are a truly incredible company to work with. The other benefit is that we are seven people all working tightly together so we can just crack on with things and make the game we want to make. It's faster and involves way more freedom than we ever had."

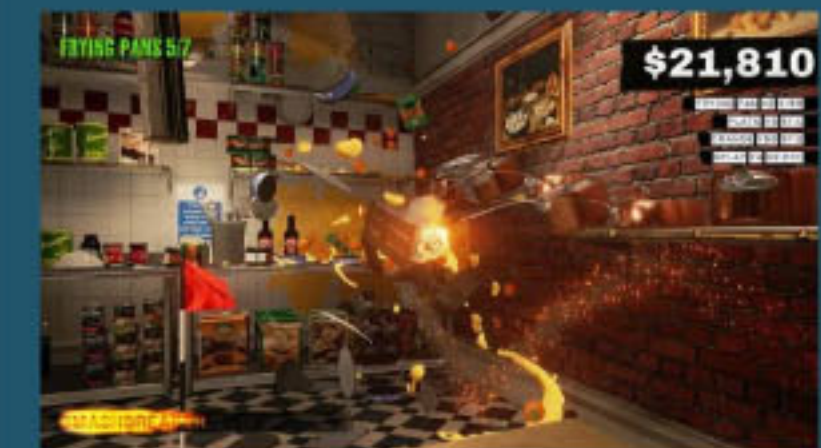
If you've had a hankering to wreck some cars at ludicrous speeds lately, *Dangerous Driving* is a smashing option. While the limitations of the tiny team occasionally present themselves, the core gameplay is so frenzied, fluid and familiarly ferocious that you'll be hard pressed to notice or even care most of the time. And this is only the studio's first punt at a full-fat racing game – seeing how its output has improved so vastly and rapidly so far, the team could yet go on to overtake the series that so clearly inspired this fast and frantic racer. "We're a small team, but we listen to our fans," Alex closes. "We're always looking to make our software better." ✨

» [PS4] The presentation feels a lot like *Burnout 3*, right down to the fonts and UI. Even the 'Have You Tried...?' loading screens are similar.



## TESTING GROUND

What Three Fields Entertainment did first



### DANGEROUS GOLF

■ The studio's 2016 debut offered an explosive twist on golf, inviting players to unleash their appetite for destruction by smacking explosive golf balls around confined spaces. Laying waste to an entire dining hall in a single shot proved remarkably satisfying.



### LETHAL VR

■ Effectively a virtual reality gun range, with the kind of weighty weapon feel you'd expect from some of the same folks who worked on *Black*. Many found it to be a little lacking in content and variety, but what it does it does pretty well.



### DANGER ZONE

■ Leapfrogging off its golfing debut, Three Fields careered onto the racing scene in 2017 with this successor to *Burnout's* Crash modes. An entertaining game in its own right, although the 2018 sequel further refined the formula.

# THE MAKING OF THE X-FILES™

## RESIST OR SERVE

WE TRACKED DOWN THE FORMER AGENTS OF BLACK OPS ENTERTAINMENT TO DELIVER THE TRUE STORY BEHIND THIS UNDERAPPRECIATED PS2 GAME BASED ON A HIT TELEVISION SERIES

Words by James Hoyle



### DEVELOPER HIGHLIGHTS

**BLACK DAWN**

**SYSTEM:** PLAYSTATION

**YEAR:** 1996

**007: THE WORLD IS**

**NOT ENOUGH**

**SYSTEM:** PLAYSTATION

**YEAR:** 2000

**THE X-FILES: RESIST**

**OR SERVE (PICTURED)**

**SYSTEM:** PS2

**YEAR:** 2002

**I**t's been a tough two decades for *X-Files* fans. Ever since stars David Duchovny and Gillian Anderson went part-time, there have been few opportunities to see that famous pair of FBI agents, Mulder and Scully, cracking a case of the supernatural together. When we have seen them on-screen, they've hardly been at their best.

Fans certainly won't have found much comfort in their videogame collections. The *X-Files* licence has produced a string of rather underwhelming mobile titles and one unloved FMV adventure. In most of these, you can't even play as Mulder or Scully, which kind of defeats the purpose of a game with the *X-Files* name attached to it.

However, there is one videogame highlight from the fallow years following the original series' 2002 finale, which proved a videogame adventure featuring the exploits of Mulder and Scully could work. *The X-Files: Resist Or Serve* not only recreated the look and spirit of the show, but also offered fans the chance to play as the iconic characters, voiced by the actual cast. However, it also received criticism for subpar graphics and gameplay, the result of a troubled development history.

"We initially went to our executive producer Michael Pole at Fox Interactive to try and land the *Buffy The Vampire Slayer* project," recalls John Botti, CEO of Black Ops Entertainment. Unfortunately, *Buffy* was already taken, but John was offered *The X-Files* instead. Being a fan of the show, he was happy to accept.

Before the *X-Files* gig, Black Ops Entertainment had made several other licensed games, including, *Warpath: Jurassic Park*, a one-on-one fighting game featuring dinosaurs, a couple of *James Bond* releases, including *007: The World Is Not Enough* and numerous sports games. The *X-Files* project, for PlayStation 2 and Microsoft's Xbox, was given a \$2-3 million budget, paying for a team of 20 to 30 people. Among them was art director Michael Field, a long-serving veteran of the company. "Black Ops started out as a great place to work," he recalls. "There were some highly competent artists and coders on staff, and the mood was upbeat and optimistic." That optimism wouldn't last for Michael, though.

At the time however, Michael did find *The X-Files* an enticing prospect. "The licence itself was hugely exciting," he says. "This was our best gig in years and morale was pretty high. For the first time, I had been granted the authority to



» [PS2] The second 'episode' in *Resist Or Serve* features a really trippy sequence in Mulder's apartment.



» [PS2] There isn't a lot of ammo, so take care to use it wisely.



### WHAT'S WITH MULDER'S FINAL BOSS BATTLE?

■ It's actually five boss battles in a row with no save points and it's an act of cruelty. "I think we did want this to be a hard area but, in the end, I think it came down to schedule and shipping the game," remembers Kirk. "We were already late, and we just ran out of time." John also explains, "The end bosses of games, in hindsight, can be tuned too hard, because they are tuned to the designers and QA team's long experience playing their game."

influence of *Resident Evil* and *Silent Hill*. "We felt that, overall, it would be accessible to all survival horror fans, but we added enough Easter eggs and mythology that fans of the show would really dig it." Fan-pleasing references were sprinkled lovingly throughout, right down to jokes about Mulder's adult video collection.

**I**n another touch of authenticity, Gillian Anderson's and David Duchovny's stunt doubles performed the motion capture work for Mulder and Scully. You can play as either and each has their own paths utilising their skills. Scully even gets autopsy minigames.

The team soon encountered trouble, though. "We started to run into problems when we started dealing with the flashlight," says Michael. "Whatever technology the Bottis had faked to win the contract fell apart under the weight of actual game meshes. And the fog technology also failed," he complains. "Instead of investing the time to fix these technologies, John abandoned them in favour of low-tech workarounds that severely detracted from the aesthetic." John denies any deception took place, going on to say, "At first, I believe the team had gone after a true mathematical solution for a 'fog envelope' combination with the flashlight, but the PS2 did not have the power to compute it. The final solution was something that worked visually given the time and budget. We never represented we had any tech in the initial pitch. I know a few months in, after the various document milestones, we began to see visual prototypes. I am not sure what was discussed, or what features were promised in the meetings, as I was not running that team. I was running the company, and it was 15 years ago. On the contrary, we were going after the *Buffy* licence. I think the honest answer is we tried to get the tech up in a way that didn't quite work first (the mathematical one), then resorted

hire my own team and we constructed a pretty talented group out of graduates from the nearby art institute."

There was little involvement from *The X-Files*' creator. "While we met Chris Carter at an *X-Files* wrap party, we got most of our direction on the licence ultimately from the studio," John relates. Regardless, Black Ops showed real commitment to faithfully representing Chris Carter's work. "Our photographers went into all the sets and photographed them in full detail," John says of just one aspect of the significant preproduction work undertaken for the project.

The genre Fox and Black Ops chose for the game was appropriate to the source material. "We tried to ride the wave of what survival horror was doing at the time," remembers lead designer and producer Kirk Lambert, acknowledging the



» [PS2] It's a thrill seeing agents Mulder and Scully explore these dark and creepy environments.

## THIS WEEK ON THE X-FILES

The game is divided into three 'episodes', each including the TV show's opening title sequence



### RENASCENCE

■ Mulder and Scully investigate the Colorado town of Red Falls where two twin sisters have been accused of witchcraft. They find the town overrun with zombies and learn of the existence of an alien artefact, which is in the possession of beings with mystical powers.



### RESONANCE

■ Back in Washington DC, Mulder and Scully report the events of Red Falls to assistant director Skinner. Mulder suffers from the effects of alien radiation which provides him with a link to the artefact. Meanwhile, Scully infiltrates a biotech company with the help of the Lone Gunmen.



### RECKONING

■ Mulder tracks the alien artefact to Tunguska but soon requires rescuing by Scully. They both follow the Cigarette Smoking Man and his henchman Krycek to a Siberian monastery, which conceals an ancient alien spacecraft. There, they must either 'resist or serve' the powerful beings.

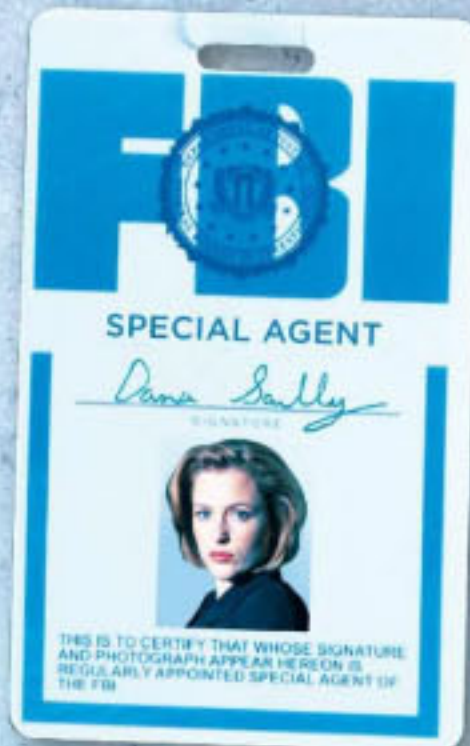
# ROLL CALL

All your favourite characters are featured – voiced by their original television performers, no less



## FOX MULDER

■ An FBI special agent obsessed with uncovering the truth about a vast government-alien conspiracy. Nicknamed 'Spooky' by his colleagues due to his fascination with the paranormal.



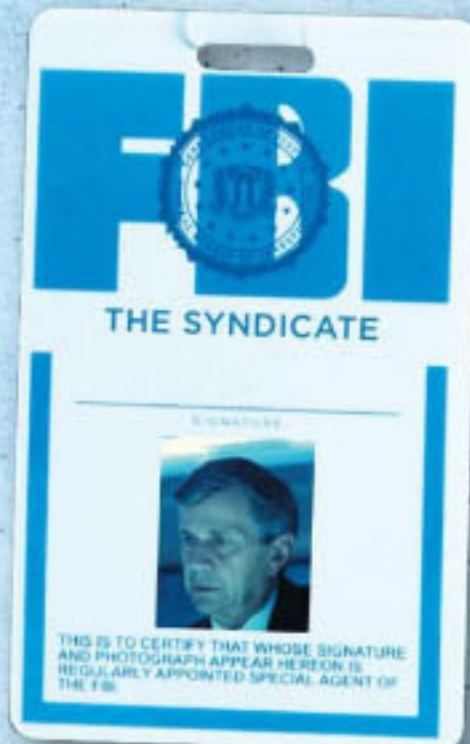
## DANA SCULLY

■ Assigned to the X-Files team to keep an eye on Mulder, she has become fiercely loyal to him. As a medical doctor, she approaches Mulder's theories with a more scientific and sceptical eye.



## WALTER SKINNER

■ Assistant director Skinner is caught between following the orders of his government bosses and his faith in Mulder and Scully and their mission. He's their ally within the FBI.



## THE CIGARETTE SMOKING MAN

■ A shadowy figure at the heart of the FBI who works to foil the efforts of Mulder and Scully to expose the conspiracy, of which he is a vital component.



## THE LONE GUNMEN

■ Frohike, Byers and Langly are an eccentric trio of conspiracy theorists and computer geeks who Mulder relies on to carry out tasks away from the prying eyes of his superiors.



## ALEX KRYCEK

■ At one time Mulder's colleague at the FBI (during the show's second season), this unscrupulous agent does the Cigarette Smoking Man's dirty work.



» [PS2] You're FBI agents, so you need to be prepared to use your weapon at any time.

to a different approach. That being a key component of the game's visual mood, it was focused on a lot. I remember it being a point of frustration, for myself included."

Kirk has his own viewpoint. "If I remember right, it was an engine limitation. We tried free cameras, but they just didn't work with our levels. You must remember Black Ops was known mostly as a sports developer. This was Black Ops' first game of this type and we were using a modified engine that had its limitations."

**M**ore trouble would come from *Resist Or Serve's* publisher. During development, Fox Interactive was sold to Vivendi Universal which wanted to take *Resist Or Serve* in a different direction.

"The new direction and story had merit and was closer to the *X-Files* licence," says John. "The problem was, we were between alpha and beta when the studio decided to toss much of the levels created and subsequently presented us with a 600-page screenplay." It was the work of Thomas Schnauz, who had previously written two episodes of the series.

Vivendi's plan retained elements of Black Ops' vision, including the grounding in survival horror and the distinct gameplay of the player characters, but the new script caused major upheaval.

Development director Jose Villeta protested. Vivendi responded by asking him to leave the project. It was a decision soon reversed. "As many people in the business know," says John of the



» [PS2] Playing as Scully, you get to perform some gruesome autopsies. Don't forget your gloves and protective glasses.



» [PS2] It's a globetrotting adventure: from a small Colorado town through to a Siberian monastery, via the FBI HQ and Tunguska.



» [PS2] The graphics got a bashing, but the team did a decent job at recapturing the characters' likenesses.



incident, "if you fire your lead game coder who has the entire codebase in his head... the project could grind to a halt. And that is exactly what happened. Jose was producing our *Terminator* game two months later when the studio execs realised they totally messed up and asked to rehire him." The changes prompted a wider shake-up within the team. "Many artists and animators just bailed," John laments.

Maggie Bellomy (then Langley) was the new lead animator. "I came in quite late in that show and I took over from a nice fella who couldn't manage the crush of notes from the publisher," Maggie remembers. "It was an expensive game and they were nervous," she says of Vivendi. "It was my job to chat with them almost daily to hear their notes and keep them feeling that production was meeting their goals."

Maggie faced challenges. "We had a junior coder programming our game animations," she relates. "He continually broke animations and blamed it on the animators. Most notoriously, he could not make sense of a run animation having

less frames in a cycle than a walk." For example, "Whenever Scully fell behind Mulder, she'd run in jerky slow-motion to try and catch up."

Maggie was forced to intervene with an artist working on cutscene integration, too. "He never got any in the game without the scene failing in some way," she remembers.

"This was a pretty dark time for me personally," Michael shares, admitting that this might cloud his recollections of the period. "My divorce had been hard, and I was suffering." He does not consider himself blameless in the behind-the-scenes chaos. "I confess that at a certain point," Michael reflects, "my emotional turmoil and pain overtook my ability to effectively manage my team."

John describes what he discovered one day on a visit to Michael's office: "I asked him if he had a spreadsheet," a document keeping track of all the work, "like the other art directors at Black Ops," he says. "He did not have anything. I helped him get a spreadsheet with level assets and times created so we could see when the project would finish and how much more it would cost."

To vent some of his own frustrations, John took up martial arts training at lunchtimes. "By the time *X-Files* was over, I had a real good working understanding of all these different types of kicks."

Gillian Anderson and David Duchovny came in at the very end of the process to record their voices, despite initial hesitation. "They were very professional to work with and it was great to get

**“HE CONTINUALLY BROKE ANIMATIONS AND BLAMED IT ON THE ANIMATORS”**

Maggie Bellomy

» [PS2] You're able to walk the halls of the FBI, enter Skinner's office, or descend to Mulder's basement den.



## WHAT HAPPENED TO BLACK OPS?

■ *The X-Files: Resist Or Serve* was one of Black Ops' last releases. After *AND 1 Streetball* in 2006, the studio shut down. Not everyone was sorry to see it wind down, however. "I thought it was a blessing for all of the gamers of the world," says Michael. John, however, is planning a comeback for the company. A resurgent Black Ops has a platformer for the new Intellivision, *Jumping Jack Russells*, and *Californiageddon* in development and dabbles in the mobile market. Find out more at [blackops.com](http://blackops.com).



» John Botti was CEO of developer Black Ops Entertainment.



» Maggie Bellomy became the new lead animator of *The X-Files* project.

their real voices in the game," John enthuses. "I never got the impression it was for a pay cheque."

The cutscene character models didn't help bring the performances to life, however. "What Will [Botti] chose to use," explains Michael, "were the regular third-person character assets that you play during the game, with some slight upgrades – and they looked bloody terrible up close. I actually find them quite hilarious to look at now that I have recovered from the shame."

**R**esist Or Serve's problems had pushed its release date from Spring 2003 to March 2004. "This was the longest time I worked on one game," says Kirk. "It was over two years easily. Back then, it was a long time for one game, especially at a small developer."

"I feel that the end product was ultimately better," John concludes of the game's difficult gestation. Experienced survival horror gamers were underwhelmed, but *X-Files* fans got what they wanted. At one event, John says, "*X-Files* fans came up to me and really thanked me for a game that matched their expectations."

Even Michael has some kind things to say about the finished product. "What we got right was atmosphere and production value," he assesses. "It wasn't all gold, but there were some pretty effective scenes."

"I think the team was satisfied with what we did. Everyone worked their ass off," says Kirk. "I think having the full cast, a well-developed story and great Easter eggs for the fans, it was a bit easier to overlook some of the game's shortcomings." As for sales, "I think it performed okay for Fox and Vivendi." The planned Xbox version, however, never materialised.

Whatever its shortcomings, we can't help but feel that *Resist Or Serve* is underappreciated. Particularly after the letdowns of recent years, this game can offer disheartened *X-Files* fans a chance to spend time with Mulder and Scully on a case set during the show's heyday, made with respect for the beloved Nineties classic. ✱



# TOWER STUDIOS

After the towering success of Sensible Software and The Bitmap Brothers, the founding figures of these two developers sought to reach fresh heights with a new company targeted at the emerging mobile game market. But, as Jon Hare tells *Retro Gamer*, the goalposts had moved

Words by David Crookes

**D**uring March 2004, developers Jon Hare and Mike Montgomery were at something of a crossroads. They were taking some time out for a road trip following the Game Developers Conference in California and reflecting, not just on the goings-on of the industry, but on life in general and where it could be taking them.

They ended up going to what Jon describes as "a funny little two-bit town in the middle of the desert,

where the only bar had a guy with two fingers and one eye playing pool". They then decided to drive their careers in a different direction. "Mike was in a position where he could stop doing what he was doing with The Bitmap Brothers," Jon says. "And I was ready for something new."

Jon and Mike had a string of hits behind them. Jon had been the codeveloper of iconic games as *Mega Lo Mania*, *Sensible Soccer* and *Cannon Fodder* with Sensible Software, and Mike had been responsible for gems such as *Speedball*, *Gods* and *The Chaos Engine*. Jon sold Sensible to Codemasters in 1999. "The initial plan was to make *Cannon Fodder 3*," he says. "But Codemasters kept shuffling the staff around and we ended up losing programmers, so it got shelved."

Jon ended up staying at Codemasters for three years, working on a few titles including *Mike Tyson Boxing* and *Real Madrid Club Football*. He left in 2002 and took a six-month holiday. "I watched the entire World Cup, every single match on television, and it was great. I would recommend it to anyone," says the Norwich City fan. Towards the end of the year, he became a consultant, working with small companies. "By that stage, though, it was becoming really hard to sell original games," he recalls.

Mike knew this, too, as did John Phillips who had cofounded The Bitmap Brothers with him – John being the Bitmap's technical director and the bod behind

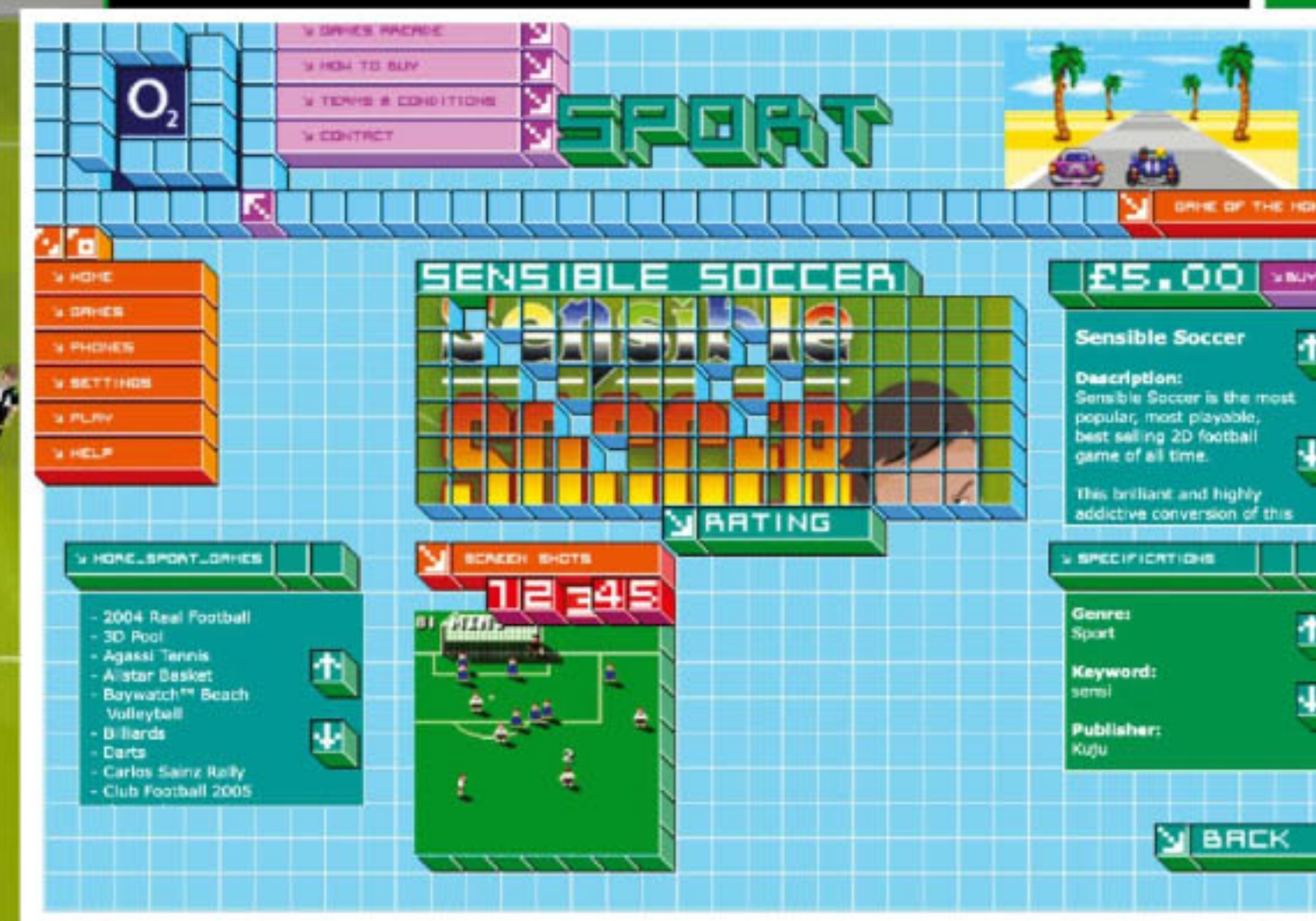


» [Amiga] Sensible Software's *Cannon Fodder* became a great mobile title thanks to involvement from original team members.

» Sobee Studios, which is part of Türk Telekom, worked with Jon Hare (but not Tower Studios) on *I Can Football*. Here Jon Hare is pictured in the centre with Mev Dinc and his team.







» [Mobile] *Sensible Soccer* sold for the princely sum of £5 when it was released on mobile in the pre-iPhone days

» [PC] Mobile games weren't bringing in the money for Tower Studios, so Jon Hare was loaned to Kuju Entertainment to work on a new *Sensible Soccer* game.

classic titles such as *Nebulus* and *Impossaball*. The death of the Amiga and the move from 16-bit games meant this once-flourishing developer was floundering in the 21st century, propped up mainly by Konami ports in its latter days and dealt bitter blows by flops such as *Speedball 2100* on the PlayStation.

Emboldened and refreshed, Jon Hare and Mike Montgomery sensed a new horizon in the guise of the mobile industry. Returning to the UK, they set up Tower Studios and asked John Phillips to come along for the ensuing ride. "We founded the company in 2004," Jon recalls. "And we called it Tower Studios because we set up in an office right next to the Tower Of London."

**It wasn't long before the new company got its first commission.** "We'd been talking to Kuju Entertainment which had secured the rights to develop *Sensible Soccer* and *Cannon Fodder* for Codemasters and they asked us if we could develop versions for mobile," says Jon.

It certainly made sense for Kuju to sign up the originator of this iconic football game for the title's debut on mobile phones, and Tower Studios tackled the game with relish. "I ended up working on *Sensible Soccer* again, along with Mike and John," Jon Hare enthuses. And he made sure it was the best it could be for the format. With more than 50 international teams, team tactics, individual player skill for more than 800 footballers, cups, leagues, injuries, red and yellow cards, it was an ambitious recreation for Java-enabled mobile handsets. Released in 2004 and with *Cannon Fodder* following in 2005, Tower Studios was off to a great start. "The graphics were by Stoo Cambridge who did the original art," Jon says.

Both games needed tweaks to the controls, not only because of the lack of eight-directional movement, but because players could only press one key at a time. Despite such restrictions, Tower Studios enjoyed developing for the mobile platform – the team had lived and worked through the pre-PlayStation era so it

was used to using every trick in the book to get around problems such as limited memory and the need to create games in 2D.

Tower Studios also felt it could work in such a space better than most, and it was certainly justified in its confidence. *Cannon Fodder* shot to number one; *Sensible Soccer* reached number two. Tower Studios then got to work on another mobile game. "I'd always wanted to do *Sensible Rugby* and ended up recreating the sport on mobile," Jon Hare says. The resulting game, *British Lions Rugby 7s*, also reached number one in 2006 but attempts to continue with the sporting theme and produce *Monster Mini Golf* floundered. "The programmer was flaky," Jon bemoans.

That, unfortunately, wasn't the only problem. "The mobile market just wasn't very good for developers, so while our games were successful, the revenue we were earning was like pin money," Jon explains. The developer trio decided to concentrate on consulting work for other companies. In 2005, Kuju Entertainment loaned Jon from Tower Studios to help develop *Sensible Soccer* for the PlayStation 2, Xbox and PC for Codemasters.



» Jon Hare (right) with Jouni Mannonen (middle), from *Sociable Soccer* coder Combo Breaker, and David White (left) who has worked on the data for *Sensible World Of Soccer* and *Sociable Soccer*.

## TIMELINE

- 2004
  - Tower Studios is founded by Jon Hare, Mike Montgomery and John Phillips.
  - *Sensible Soccer* is released on mobile following a deal with Kuju Entertainment.
- 2005
  - *Cannon Fodder* gets a mobile launch.
- 2006
  - *British Rugby Lions 7s* is published on mobile devices.
- 2007
  - Jon Hare, Mike Montgomery and John Phillips get stuck into consultancy work.
  - Jon becomes director of development at Nikotova Games in Ukraine.
- 2009
  - Jon assumes control of Tower Studios.
  - Messaging app Me-Motes Messenger is developed with Atomic Planet.
- 2010
  - Tower Studios publishes *Shoot To Kill*, developed for iOS by Vivid Games.
- 2011
  - Vivid Games also works on and releases *Speedball 2* on mobile.
- 2014
  - Tower Studios' first original release, *Word Explorer*, finally sees the light of day on iOS and PC.
- 2015
  - A Kickstarter for *Sociable Soccer* is launched – then pulled.
- 2017
  - *Sociable Soccer*'s Early Access period on Steam begins.



## WHERE ARE THEY NOW?



### JON HARE

■ Jon Hare remains the owner of Tower Studios and his main focus is now on *Sociable Soccer*. As a massive football fan, he is hoping the game will pick up where *Sensible Soccer* left off in the minds of gamers and, with a lucrative deal

with telecoms giant China Mobile in the bag, there is every chance of it becoming a major success. Jon has also been a visiting lecturer at the University Of Westminster and he is a voting member of BAFTA. He continues to pursue his love of music, too.



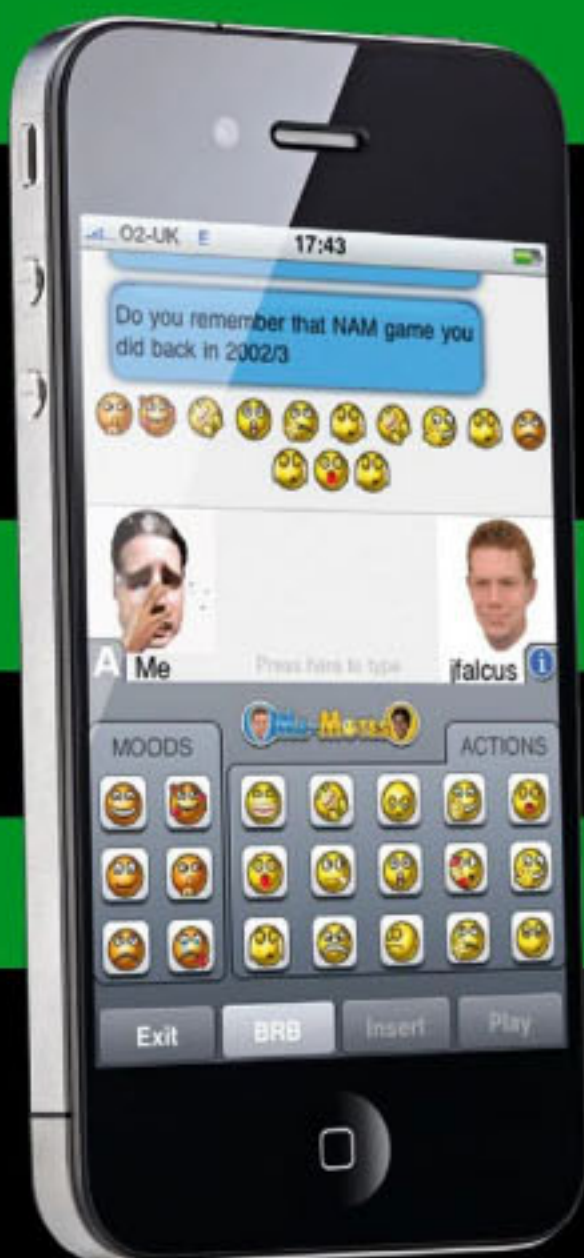
### MIKE MONTGOMERY

■ After formally leaving Tower Studios in 2009, having already massively scaled down his involvement following the first three mobile game releases (*Sensible Soccer*, *Cannon Fodder* and *British Lions Rugby 7s*) Mike Montgomery

continued to work as a consultant for various companies, among them Slightly Mad Studios for which he helped to create *Project Cars*. He also retained the rights to The Bitmap Brothers games, allowing mobile releases not only of *Speedball II Evolution* but also *The Chaos Engine*, *Gods Remastered* and *Z*. We're really hoping Mike now turns his attention to a remake of *Xenon 2: Megablast*.

### JOHN PHILLIPS

■ John Phillips had also gone off to do his own thing shortly after Tower Studio made its first three mobile games, and he too worked as a consultant for a certain period of time. He also worked with Mike Montgomery on a number of classic Bitmap Brothers re-releases, and Jon Hare says that, today, his former business partner lives in Cornwall and continues to program.



» [iOS] The messaging app Me Motes Messenger – made in collaboration with Atomic Planet – was a departure from games development.

▶ He also worked as a director of development for Nikitova in Ukraine on games such as *Showtime Championship Boxing*, assisted Monumental Games in Nottingham with *Football Superstars* and got involved with the development of a 3D multiplayer online soccer game called *I Can Football* which was developed in Turkey. "It was good for me to see how a game like that worked," Jon Hare says of a title published in 2009. "I was also constantly creating football games."

Even so, Jon had hit a bad patch. "I'd had three really good clients but, one week in December 2008 I'd lost them all due to the stock market crash and ended up with nothing." Jon found himself in 2009 looking for a new direction once more. He'd had a spell working for Jagex in 2009 but he was on the lookout for fresh opportunities and decided it was time to bring Tower Studios back to life.

"I spoke to John and Mike and said, 'Look, Tower Studios has been sitting around doing nothing but the consulting work I do has gone, so would you mind if I take the company over and run it on my own?'" Jon recalls. "Mike and John said it would be no problem so I became sole owner of the company and that's when Tower picked up again."

Jon pushed forward with mobile development once more, giving the company a second wind. At the time, the iPhone was starting to make in-roads and app development was about to take off. "I met an American guy who ran the largest school photography company in the USA and he said we ought to do something with the photos in some kind of app," Jon says.

"At the time, there were only 1,500 titles per year for touchscreens and it was before the market became saturated. The guy had a link with a company in New York which would take photographs and turn them into a 3D model of a face so we thought we could make something based around that and developed Me Motes Messenger with Atomic Planet." The social network app was released for PC and iOS but users needed an AIM account. "That put people off," Jon laments.



» [iOS] Handed the licence from The Bitmap Brothers, Tower Studios commissioned Vivid Games to revive *Speedball 2* for mobile devices.

“They needed to turn a 2/10 game into a 5/10 game to get it through sign-off”

Jon Hare

As well as running Tower Studios, Jon continued to be a consultant and directed *Doctor Who: Return To Earth on the Wii for Asylum Entertainment*. "I'd been asked to consult on the game in July 2010 because it was broken," he explains. "They needed to turn a 2/10 game into a 5/10 game to get it through the sign-off processes for both the BBC and Nintendo so they could get it to market by Christmas."

Such experiences made him more determined to develop a fresh publishing model and Tower Studios not only focussed on working with top-tier studios on original and licensed IP, it introduced its Free For Freaks payment system which allowed its games to

## THE DNA OF TOWER STUDIOS



### 16-BIT DEVELOPMENT

■ Tower Studios was the coming together of friends from two different 16-bit development studios: Sensible Software and The Bitmap Brothers. The pair had worked with each other during the Nineties and Jon Hare, Mike Montgomery and John Phillips were close friends. Tower's greatest successes has come from revitalising or reimagining 16-bit titles such as *Speedball 2*.



### FOOTBALL

■ Given Jon Hare's immense success with *Sensible Soccer* over the years, it's obvious football runs through this Norwich City fan's veins. "After selling Sensible Software to Codemasters, I basically never stopped working on football games for about four years," Jon says. Of those titles, *Sensible Soccer* on mobile and *Sociable Soccer* are Tower Studios releases.



» [iOS] A tricky game with clues to solve anagrams, *Word Explorer* was described by Jon Hare as a 21st century answer to crosswords.

be downloaded for free and players to play as much as they wanted and be rewarded for their skills. Only if they needed a leg-up did they need to pay for optional extras.

The system was put in place during a deal signed between Tower Studios and Polish developer Vivid Games and *Shoot To Kill* became the first title to make use of Free For Freaks on iPhone and iPod Touch. Tower Studios then sought to look back to move forward, relying again on classic games for success.

"I'd been speaking to Mike and he asked if we'd like to recreate one of The Bitmap Brothers' old games to mobile and I said I'd love to do *Speedball 2*," Jon says. "So I went to Vivid and asked if they were interested and they were." *Speedball 2: Evolution* was released in 2011 for iOS and Mac and retained the basic gameplay

of the original while adding a new intro, 12 teams, six new playing arenas and multiplayer support. It was later released for the PSP, PS3 and remade for PC as *Speedball 2 HD* in 2013.

Vivid also worked with Tower on *Alien Puzzle Adventure*, released as DSiWare, and it developed the original game *Word Explorer* in 2014 – Jon's first original IP for some time. "The development dragged on for about four years but it eventually came out on PC and mobile," Jon continues, discussing a game which had puzzles based on global locations and encouraged gamers to solve anagrams while collecting pictures. "But the length of time meant it suffered because free-to-play had become fashionable and we couldn't get monetisation to work with this one."



» [PS4] Tower Studios is hoping *Sociable Soccer* will attract scores of *Sensible Soccer* fans and spark a new era for football videogames.

**A**fter *Word Explorer*, Tower looked to create a successor to *Sensible Soccer* called *Sociable Soccer* and, in 2017, the game kicked off in Early Access on Steam.

It's still in development and Jon says that is down to the different environment in which he operates today.

"In the Eighties and Nineties, you could get deals with advances on the back of publishers trusting you to do a good job but these days it's so hard," he says. "It took me two-and-a-half years to find a company actually willing to pay money up-front and I had to go to China for that. It's just become unfashionable for companies to risk money on development, even when development is pretty advanced."

It's a far cry from the days of *Sensible Soccer* and Jon is the first to admit that Tower Studios has, in no way, hit the heights of his former company. "Sensible Software was the most successful by a country mile," he says. So far, *Speedball 2 HD* has been the most successful title for Tower, but the studio is hoping *Sociable Soccer* will kick off a new era and go some way towards emulating the winning streak Sensible Software once enjoyed. You can't help but wish the company well in achieving its goal. ✨



### MOBILE MARKET

■ Born from a desire to take advantage of mobile handsets capable of running games, Tower Studios dedicated its early years to such development and kept coming back to it, particularly in 2010 with *Shoot To Kill* and again in 2014 with *Word Explorer* when the developer was able to target the iPhone market by publishing games made on its behalf by Vivid Games.



### COLLABORATION

■ Since Tower Studios has had no direct staff of its own, it has long sought to work with others. While Jon Hare, Mike Montgomery and John Phillips were hands-on with software development to start with, Jon did a deal with Vivid Games in Poland in 2009 and it became one of Tower Studios' major collaborators. Today, Vivid Games is best known for *Real Boxing* for PC, Mac and mobile devices.



### CHALLENGING ENVIRONMENT

■ Tower Studios has by no means been a flop company: it continues to flourish today and it has had three number one charting games out of ten which is a decent return. But Jon Hare is the first to admit that releasing original IP today is not as easy as it once was, so the company has had to rely on spins on established games and devise new methods of working.

**FIRST JOB**  
Paperboy

**CURRENT JOB**  
CEO of Firebrand Games

**FAVOURITE FILM**  
Aliens

**FAVOURITE ALBUM**  
Bat Out Of Hell  
by Meatloaf

**FAVOURITE BOOK:**  
Absolute Power  
by David Baldacci

**FIRST COMPUTER/CONSOLE**  
ZX81

**FAVOURITE COMPUTER/CONSOLE**  
C64

**BEST GAMING ACHIEVEMENT**  
Building games for  
over 35 years and still  
feeling passionate  
about it



**BESTSELLING PRODUCT:**  
Hannah Montana (DS)

**BEST HOLIDAY**  
Can I just say LIFE?

**WHO YOU WANT TO BE STRANDED WITH**  
My fiance Tricia. We get  
on like a house on fire

"Some games you know are a bag of shite but no one wants to be told they're crap, even if they are"  
*Mark Greenshields*

194-068105103032068117103

SEX: M      NAME: Mark Greenshields

DATE OF BIRTH: 1966      PLACE OF BIRTH: Glasgow

**BIOGRAPHY**  
Mark spent the Eighties coding many varied titles for the C64 and now heads up Firebrand Games, splitting his time between Florida and Glasgow.





# Mark Greenshields

What cherished games would you take to the island?

From Snake clones in Scotland to supercars in sunny Florida, we join Mark Greenshields for a ride through four decades of making games

Words by Paul Drury

**C**an the country you're coding in influence the game you make? As Mark Greenshields has worked in Scotland, England, Canada, France and the USA over his four decades in the games business, we thought he would be a good person to ask.

"Definitely. No doubt about it," the games industry veteran replies in his clear Scottish brogue. "There are huge cultural differences in what different nationalities want to put into games. Even the climate makes a difference. In Glasgow, the weather sucks most of the time, so the one time you don't want to be inside working is summer – and if you're trying to get a game done to release for Christmas, that's when you're doing it. In Florida, in the summer it's 40 degrees centigrade and you've got thunderstorms. You want to be inside!"

We thought we were onto something, given that Mark is currently based in Orlando, producing games featuring beautiful supercars racing through glamorous locations, whereas his very first game, coded in Glasgow, involved flattening a grim urban sprawl of soulless tower blocks. *Island Blitz* for the VIC-20 was written when he was just 15 years old and was very much a homemade product. He copied the cassettes himself, had hand-drawn inserts printed and convinced local shops, including WHSmith, to stock his game. It was a pretty gutsy feat for a schoolboy, and it wasn't the last time he was proactive about getting ahead in the games business.

"I found out which shop was going to get the first Commodore 64s in Scotland," he grins. "I got chatting with them, showed them my game and they asked me

to write a demo to run on this new computer for their front window. They gave me a C64 with serial number two. Number one apparently went to the distributor in England. It broke in less than three weeks and I got another one, but I wish I'd held on to that machine. It would be worth a fortune now!"

As the Commodore 64 gained ground in the home computer market, Mark moved up from the VIC-20 and started learning machine code on the new Commodore machine. Back then, this meant studying often bemusing books on the subject, which could be as frustrating as it was enlightening. "I was with some mates at a computer show in Edinburgh and Tim Hartnell of Interface Publications was there," remembers Mark. "They published books on everything, but I thought they were bollocks. Just factually inaccurate. My mate went straight up to Tim and said, 'My mate thinks your books are shite.' I'll give Tim his due, he said to me, this cocky little kid, 'Could you do better?'"

Mark assured him he could and went on to write *Mastering The Commodore 64* for Interface Publications, which focused primarily on BASIC programming, before going the full

hex with *Mastering Machine Code On The Commodore 64*. Around the same time, Mark produced *Mad Monty* for the C64, a take on *Snake* with increasingly elaborate mazes and a jittery mongoose on your tail. Computer coding was clearly his main interest and after college, he did begin a degree course in Computer Science at Strathclyde University, only to drop out after the first year because "it was about as interesting as painting a wall". He had never stopped coding games, though, and his homage to *Bomb Jack*, subtly titled *Bombo*, was published by Alligata in 1986, though it was written the year before.

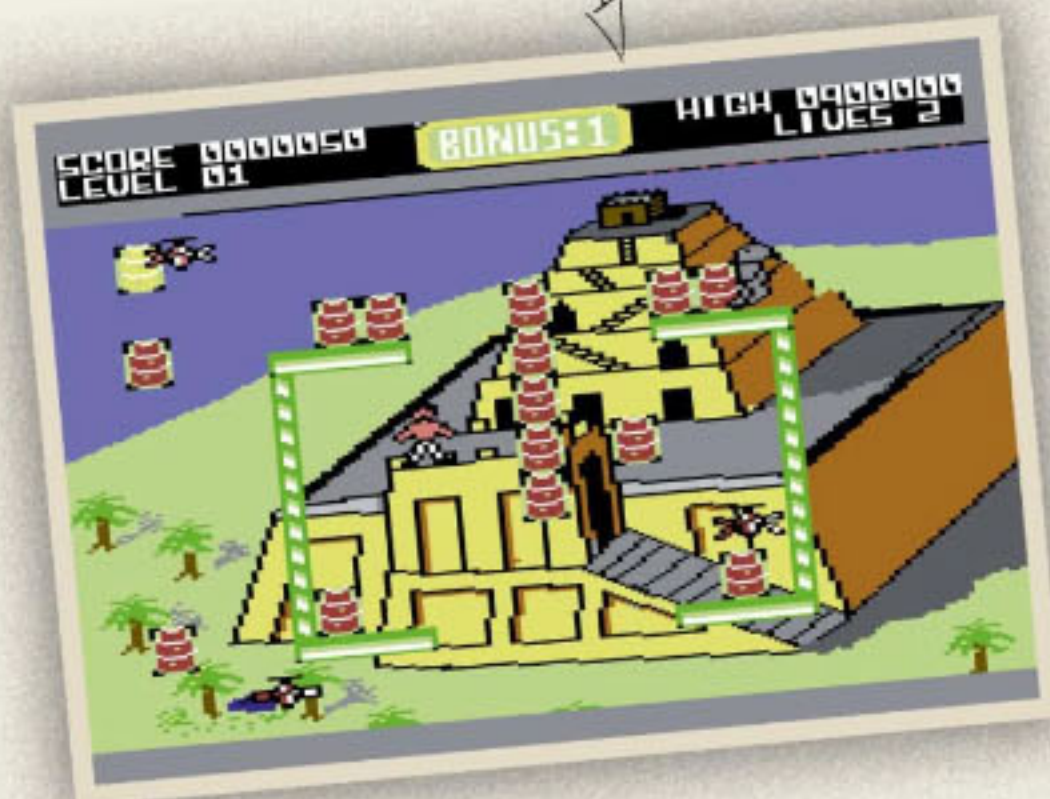
"Yes, it was a blatant rip-off," Mark admits, "but in those days you didn't think like that. There wasn't really the concept of IP rights – you just made a game. And Ben Daglish did some great music for it. He was an absolute genius and a really nice guy. He did music for four or five of my games. He was eccentric but always had such passion and created sounds no one else was creating."

After leaving university, Mark landed a job with Domark and moved south to London, initially to work on *Live And Let Die*. When that particular version of the *James Bond* licence stalled, he was asked to convert innovative puzzler *Split Personalities* to the Commodore 64 as a side project, a task which should have taken three months, yet he was given a mere three weeks. ▶

## Trivia

Mark was renowned for being able to code games incredibly quickly and managed to produce *Rik The Roadie* (1988) for the Commodore 64 in just three evenings. "It was an utter bag of shite, though" he adds.

Bombo (C64): That ziggurat makes us think of Crystal Castles...





## Praise for Mark

Here's what **Retro Gamer** has to say about Mark's work...



**Darran Jones**

My favourite game that Mark has been involved with is *Split Personalities*. It was one of my go to puzzle games on the Amstrad CPC. I remember playing *Postman Pat* as well, although again, on the Amstrad. It's a shame Mark's Amstrad book never came out, as I couldn't code my way out of a paper bag.



**Paul Drury**

It's always a pleasure to talk to such a prolific programmer as Mark and to find him honest enough to tell the stories behind the misses as well as the hits. His infectious enthusiasm for making games remains undiminished after all these years, and I look forward to him beating me at *Bomb Jack* at this year's Free Play Florida event.

*Blazer (C64) is a solid, if punishing, scrolling shooter. A nod to Mark's love of Star Force.*

▶ "I did want to die during those 21 days," he says, with no discernible irony. "I fell asleep on my keyboard many times and after I'd finished the game, I was driving back to Glasgow and fell asleep at the wheel. I woke up with the car on the central reservation. *Split Personalities* is still one of my favourite projects, and it proved I could deliver a finished game that quickly, but it did nearly kill me."

Having survived that brush with death on the A74, Mark's next adventure was forming a small development studio of his own, with friends Darren Melbourne and Ned Langman. Paranoid Software set up in the offices of Nexus in Beckenham, South East London, and produced a pair of decent C64 shoot-'em-ups, *Hades Nebula* and *Blazer*, in 1987. "We were just three mates, young lads with a lot of passion for games," enthuses Mark, "but to be honest, we didn't have a bloody clue about how to run a business. We delivered the games but then it just all fell apart."

At least their friendship survived the messy end of Paranoid Software and the developer trio reinvented itself as Dimension Software, whose output included the crosshair shooter *Counterforce*. Mark also found time to convert *Phantomas* from the Spectrum to the C64 for Codemasters, though the game never saw an official release. His conversion of ball-based platformer puzzler *Power Pyramids* for Quiksilver did make it out, though with a *Zzap!64* rating of just 13% – it might have been better if it hadn't seen the light of day. Did that

"We were just three mates, young lads with a lot of passion for games"

*Mark Greenfields*

slating of your work hurt, Mark? "Yes it did, and it stings to this day," he replies. "Some games you know are a bag of shite but no one wants to be told they're crap, even if they are. And though it was no 'Sizzler', I really didn't think *Power Pyramids* was that bad! There have been some games in my career that from the day I was given the project, I knew it was going to be shite but you have to do them to pay the bills. There's a point when you're writing a game when you realise it's going to be pretty good... but with others, you know they have no soul. Those are a real slog to finish."

**M**ark is refreshingly honest about taking on whatever projects he was offered, which meant he worked on a highly diverse bunch of C64 titles, both in terms of genre and quality, from gritty Vietnam-themed *19 Part One: Boot Camp* to several *Sooty Show* games.

At the end of the Eighties, he worked for Anil Gupta, one of the founders of Anirog Software, coding *Tip Off* and *Rally Cross Challenge* for his new venture, Anco. Mark also got involved with the famous footy game, *Kick Off*, and is eager to tell his half of the story. "I know Dino Dini claims to be the sole creator of *Kick Off* but I'm telling you, Anil was the main driver of the game [and] they fell out. By then, I'd started a company called Enigma Variations and I said we could take on [the game]. One of our programmers started on the C64 version but it was dreadful, so I took over... and then Anil did a deal with a Japanese company called Imagineer to do [the game on the] NES. I spent a month in Tokyo basically getting to grips with the machine because our documents were all in Japanese and I spent time in the library relearning the physics you need to understand to do a football game."

And get to grips he did. Mark produced the NES, SNES and PC version, as well as significant parts of the Game Boy port, and his core code remained part of future builds of the game for some time. Indeed, his lasting affection for the title means he's not quite finished with it just yet (more on that later), but as the Eighties came to an end Mark found himself handling a series of licensed children-focused games for publisher Alternative Software. When your boss bounded into the studio and announced he had secured the *Thomas The Tank Engine* deal, did your heart just sink, Mark?

"I honestly enjoyed doing them," he assures us. "Okay, by the end of *Postman Pat* I wanted to kill that little fucking cat. That music! We loathed it. I hear it now and I want to punch



## Timeline

1983

### MAD MONTY

■ YEAR: 1983

■ FORMAT: C64

Mark's first 'proper' published game, released by Screenplay, this adds intricate wall layouts and other obstacles to the *Snake* formula.



1986

### BOMBO

■ YEAR: 1986

■ FORMAT: C64

Published by Alligata, this is a decent version of Tehkan's *Bomb Jack*, with nice background locations and a head-nodding soundtrack by Ben Daglish.

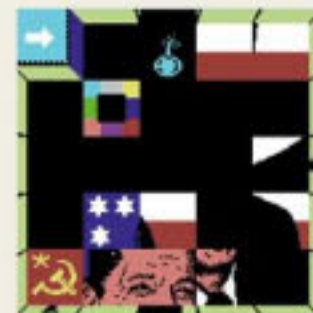


### SPLIT PERSONALITIES

■ YEAR: 1986

■ FORMAT: C64

Mark handled the C64 version of this entertaining puzzler, which let you mess with the heads of Reagan, Thatcher and Lord Sugar. See RG191 for the full story.



1987

### NEBULA

■ YEAR: 1987

■ FORMAT: C64

The first fruits of the short-lived Paranoid Software, which Mark formed with Darren Melbourne and Ned Langham, this is a decent if brutal shooter.



Postman Pat (C64):  
Vanjacking and lukewarm  
tea in inner city Greendale



Slug (C64) was a  
collaboration between Mark  
and Darren Melbourne.

## Book Ends

It's not everyone who becomes a published author at the age of 15, but Mark had no less than three programming guides in print before he left school. "I was writing the kind of books I would want to learn from," he says, "factual, understandable and no bullshit. I had a part-time job at Lasky's and they had my books on their shelf. People would see my name badge and say, 'Is this you?' Some even got me to sign their copy! It made me feel so proud. Years later, I'd get contacted by people who said they owed their whole career to those books. I had tears in my eyes. To think, 'Holy fuck, I had that much of an impact,'" Mark also wrote a fourth book, *Mastering The Amstrad CPC*, which was never published, presumably because no one thought the Amstrad was worth mastering. [You're fired! – Ed].

a wall. Some of the people I worked with hated doing kids' games, like it was beneath them, but I didn't have a problem [with it]. I was building a game and getting paid for it." You may be surprised to learn that *Postman Pat* is actually an overhead driving game, with almost as much vehicular-based carnage as the original *GTA* due to how incredibly easy it is to crash your little red van on the mean streets of Greendale. Though we have a soft spot for *The Wombles*, most of Mark's budget games for Alternative are competent at best, churned out to a tight deadline for a limited amount of cash. "You're not going to spend three months creating some amazing parallax scrolling routine for your game," smiles Mark, "but around 1988, I had this brainwave. Why don't we have a system to help us turn out these little games quickly, some way we can write something once and deploy it everywhere? So I invented Enigma Code, which is essentially what Unity and Unreal became. We had it on the C64, BBC Micro, Spectrum, Amstrad, Amiga, ST and PC... so something like *The Wombles*, which would normally take six to eight weeks to write and would need at least four programmers to cover all those platforms, took 11 days to put on all seven machines. We used it for lots of those games like *Sooty & Sweep*. I tried to get it patented but the lawyer I used had no fucking idea. If I'd done that, I'd be Bill Gates! There was nothing else like it back then and the systems they use today are very similar in concept to how my Enigma Code worked. Because of the failure of that lawyer, I'm not a multimillionaire." Talking of money, by the early Nineties there was precious little of it left in producing games for the ageing C64. Mark did step up to the Amiga and PC, though only handled one conversion, *Alien Olympics*, before recognising it was impossible for him to code and also run a business successfully. He took the tough decision to leave programming behind and moved into game production. The role of producer is often sneered at in the modern industry, but trying to

## Mark on Mark

Our castaway picks his favourite projects



**KICK OFF**  
"I started working on *Kick Off* in 1989 and I'm still passionate about it. There aren't many games that do that to you."



**HADES NEBULA**  
"It was the first game that I wrote that was really well received and it cemented my career. I knew this was something I would do forever."



**BLUR**  
"We got the Wii version to Beta before it was cancelled. It would have been the best driving game on a Nintendo console ever!"

1990

1991

2006

2011

**THE WOMBLES**

■ YEAR: 1990  
■ FORMAT: C64

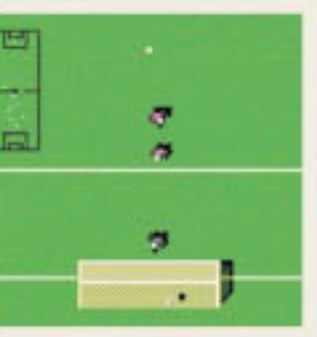
One of many kids' licences coded by Mark, we like this flick-screen adventure featuring the proto-eco-warriors of Wimbledon Common, if only for the theme tune.



**KICK OFF**

■ YEAR: 1991  
■ FORMAT: NES

Mark began coding the C64 version of this well-loved footy game before moving on to the NES and later handling *Super Kick Off* for the SNES and Game Boy.



**HANNAH MONTANA**

■ YEAR: 2006  
■ FORMAT: DS

You'll find small talk and skateboarding in this hugely successful take on the Day-Glo TV show but sadly no hammers to lick. Sorry, Miley.



**NEED FOR SPEED: THE RUN**

■ YEAR: 2011  
■ FORMAT: Wii/3DS

The 18th instalment of this series, *The Run* is notable for getting you out of your car for brief QTE shenanigans.





State of Emergency 2 (PS2) is due to be remade as *Brexit Simulator 2020*.

## Readers' Questions

**Merman:** Would you ever go back to coding for the Commodore 64? If I got involved again I might realise I'm nowhere near as good a coder as I was, and that's a realisation I wouldn't want. I know my pal Darren Melbourne, who created the C64 Mini – I worked with him on the C64DTV he did before that – would love me to do something but I just can't. I'm 53 years old, I've got kids and a grandchild and a lot of people depend on me. I won't be making any money coding on the C64. If I won the lottery, yes!

**Northway:** How well did your books sell and did they give you any 'status' in the industry?

The first one sold well, though they pissed me off by not publishing it in February 1983 when I finished it and instead published it in September when loads of other books were out. It still sold around 15,000 copies and I made several thousand pounds in royalties which is great for a 15-year-old lad. I bought a motorbike much to the chagrin of my parents! The second one on mastering machine code didn't do half so well. The reviews were good but there was a proliferation of books out by then. The third one sold about 5,000 or 6,000. Did they give me any 'status'? Not in the slightest! They were cool to do, though, and they did make me proud. I still feel that when I see anything I've done on a shelf.

**Mr Jenzie:** Did you ever meet Gilbert The Alien?

We had been doing a lot of contract work back then and we wanted to do something of our own. Gilbert was on television so I went directly to ITV for the licence, which cost pennies. I did the C64 version and my business partner Richard Naylor did the Spectrum and Amstrad ones. We did loads of press and there's this horrendous picture of Richard and I in suits with Gilbert in the middle... but he was never actually there! It was done by the Eighties equivalent of Photoshop, so he was physically cut out, like a stencil, and stuck on. So no, I never did meet Gilbert.



"There are a lot of shit producers in the industry, who can kill projects"

Mark Greenshields

► manage a large team of disparate individuals, keeping them on task and on budget, whilst diplomatically explaining to an impatient publisher that the game isn't quite ready yet, must be as challenging as it is crucial, we imagine.

"It's not an impossible job but you have to be very good at seeing the whole scope of a game," Mark agrees. "You have to handle the dynamics of the team. Artists are creative, programmers are more technical and like order... there's a lot of people management. I know there are a lot of shit producers in the industry, who can kill projects. In my later years, I've hired quite a few. Not on purpose, of course."

**F**rom the mid-Nineties through to the Noughties, Mark worked on a diverse range of games ranging from the like of *State Of Emergency 2*

to *Bear In The Big Blue House*, sometimes as producer and other times as CEO of a development studio. Of the many titles he had a hand in during this period of his career, has he a favourite, we ask?

"*Hannah Montana*," he exclaims, rather surprisingly, referring to the DS game based on the popular Disney TV series. "The majority of the team were female, including the designer and lead artist, and they were young, passionate people. We had to argue for months with Disney to give the game a unique visual style and eventually they agreed. It was the most successful title they ever published. It did 3.5 million units on the DS alone, which is pretty damn good – it's the best-selling game I've been involved in!"

Well aware of the demands as well as the rewards of making games in the new millennium, Mark set up Firebrand Games in 2006, recruiting much of the original team from

his previous venture, DC Studios. With offices in both Glasgow and Orlando, Florida, Firebrand has spent over a decade making a name for itself in the racing game field, producing several high-speed *Trackmania* and *Need For Speed* titles amongst many others. Can handling a triple-A licence be a little daunting, Mark?

"When I first quoted a seven-figure budget to develop a game, yeah, I was crapping my pants," he admits.

"That's a lot of bloody money, but once you've done three or four of them, you recognise that's what it costs to make a game. They're just numbers. And if you don't budget a project properly, you're not going to be able to pay people..."

Focusing predominantly on a single genre can make sense for a developer, especially as Mark is a self-confessed car fanatic. However, he has always known that diversification is vital for staying in the videogames industry, and recently it has taken him back to one of his fondly-remembered titles from the Eighties. When Anil Gupta died in 2003, Mark bought the rights to the *Kick Off* name and game IP from the receiver. He had toyed with revisiting the footy franchise several times over the years, and has now decided the time is right to give the much-loved footy game a modern makeover. "We're not trying

to compete with *FIFA*," Mark highlights. "We are making a fast, simple-to-play, arcade-style cross-platform game in full 3D. Unfortunately, someone whose name is associated with *Kick Off* released a game [the other] year which is utter, utter shite. [...] It has sullied the name. But that aside, when our game comes out, it will be what *Kick Off* could have become – if someone had done it right." Bring on the beautiful game, Mark. ✱

## Trivia

Based on the Paul Hardcastle hit, *19 Part One: Boot Camp* features a sniper rifle and a telescopic viewpoint, over a decade before *Silent Scope* hit arcades. Can you think of an earlier example?





# Mark's Desert

# Island Disks

The games that Mark simply  
couldn't live without

## 01 Pole Position (ARCADE)

I could kick anyone's ass on this. I played it in an arcade on Jamaica Street in Glasgow called Treasure Island, and I was the best player I knew.

## 02 Star Force (ARCADE)

I love vertical scrollers and this was the first one that really lit my fire. It was where my games *Hades Nebula* and *Blazer* came from, and I just really enjoyed it.

## 03 Killer Watt (C64)

I thought the music was phenomenal. I have a very varied taste in music and this was the first time I'd heard Bach's *Tocatta And Fugue In D Minor*. The game was fun as well, of course. I got to know Tony Crowther [the author] during Alligata days – we went for drinks in Sheffield and that's when I realised pub opening hours in England were a lot worse than in Scotland!

## 04 Trackmania (DS)

I was talking to the folks who were doing the original game and I said it had to go on consoles. It took me months to convince them we wouldn't ruin their baby [...]. Eventually they agreed and we did the impossible in creating a real-time track builder that you'd be able to instantly race on. It's still my favourite racing game that we've done.

## 05 Myriad (VIC-20)

It was one I've always remembered enjoying. Nowadays my game-playing skills are dreadful but the two genres I've always been good at are shooters and driving games.

## 06 Gridrunner (C64)

It's simple, but great fun. I liked a lot of Jeff Minter's games. Our paths would often cross back in the old days.

## 07 Jet Set Willy (C64)

I was a Commodore guy so I never played it on the Spectrum. It was just so well crafted. It could be frustrating but it always felt like it was your fault that you couldn't do it.

## 08 Jetpac (VIC-20)

It was bloody awesome! Great to play and felt good... I loved playing it.

01



02



03



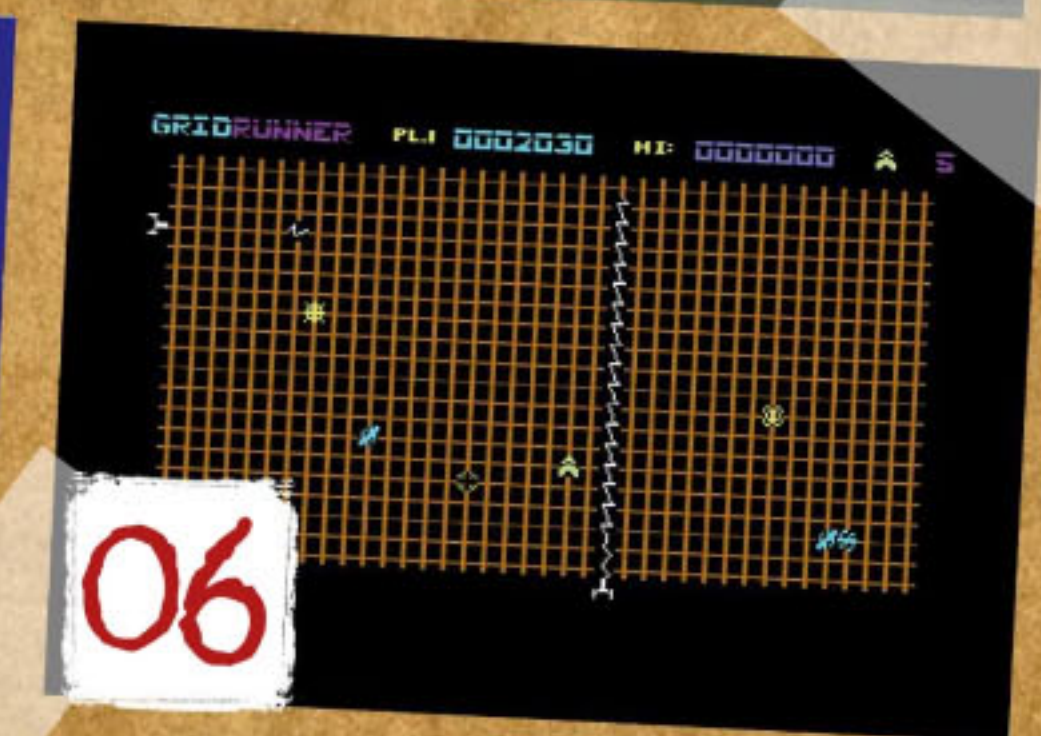
04



05



06



08



Mark's company Firebrand has produced some fine handheld racers, including Colin McRae: Dirt 2 on the DS.



x1

50%

# Earthworm Jim 2

PUPPY LOVE

» RETROREVIVAL



» MEGA DRIVE » 1995 » SHINY ENTERTAINMENT

**I wouldn't call myself a crazy 'dog person', but I am a fan of the fluffy little guys.** I had a poodle growing up, who was just the best, and I die a little inside whenever my partner reminds me that she has so many office dogs at her new job that she had to make a rota for them. So, with that in mind, level three of *Earthworm Jim 2* feels like a personal attack.

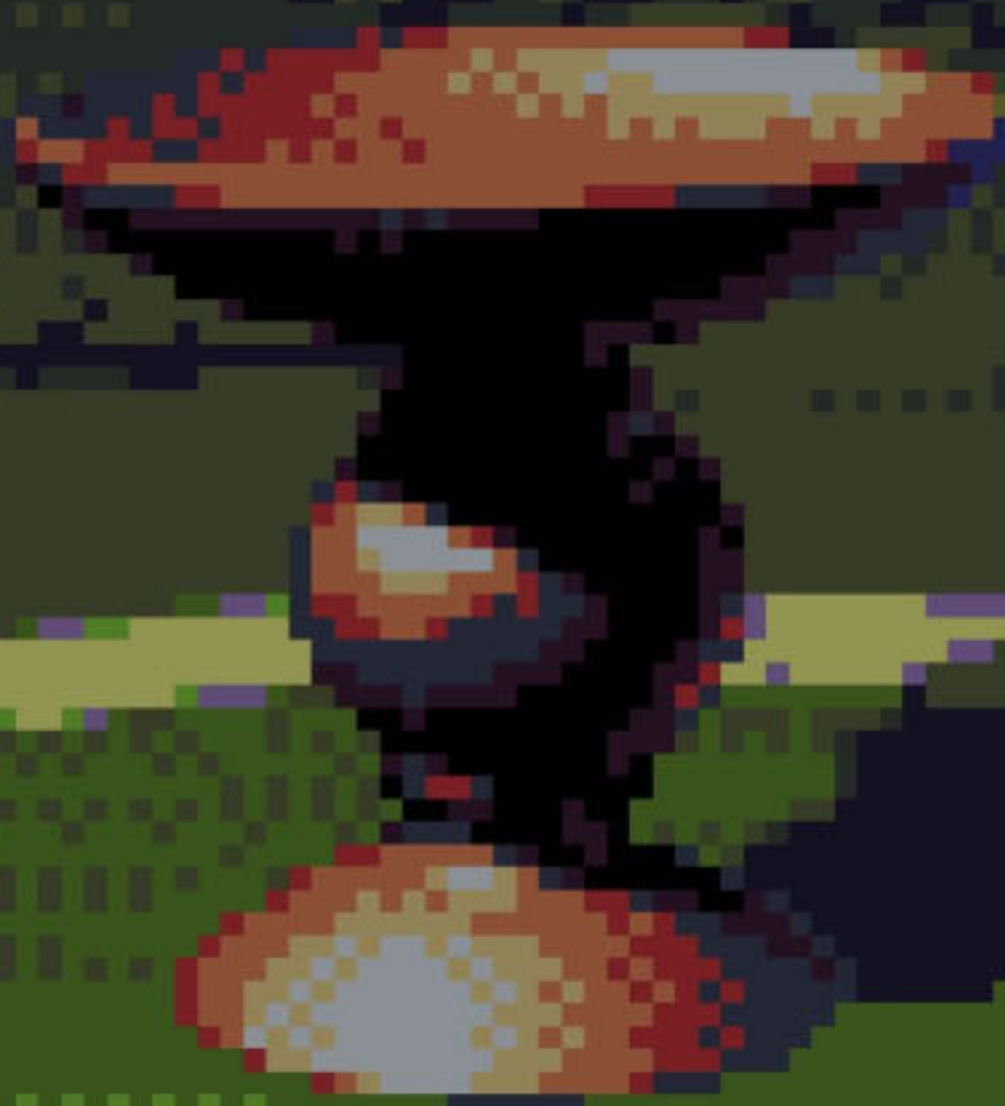
Here, the intergalactic mercenary (and all-round prick) Psy-Crow hits a new low as he attempts to fling innocent puppies from a two-storey building. Jim, being the hero he is, grabs a cushion (or giant marshmallow, it's hard to tell) and tries to bounce the poor pups over to their pink papa, Peter Puppy. It's a setup that could be succinctly described as: 'mild peril'.

And perilous it is: should Jim balls it up and let one of the helpless little doggos fall to the ground, they're dead. Gone forever. They're not coming back. Let enough of them kiss the pavement, and Peter (understandably) loses his shit, transforming into a grotesque beast and beating Jim senseless for his sheer incompetence.

Not content with murdering children with gravity, Psy-Crow confounds things even further. At times, he throws a bomb into the mix, relying on Jim's few brain cells and drive to be a hero to manipulate him into bouncing the bomb into the puppies' safe house. Our dastardly villain hasn't accounted for Peter's fatherly instinct, however, and as the bomb tumbles into the chute he plucks it out and hurls it back at the boisterous bird.

It's an inventive boss fight, and (for me at least) it has high stakes. I don't want the death of pixelated puppies on my consciousness, so every time I encounter this level I do my best to save each and every one them. Of course, I'm not very good; it's taken me *two whole decades* to realise you can hit a button to rotate Jim 180 degrees, making clutch saves all that more easy.

*Earthworm Jim 2* is a game crammed full of inventiveness, and this level always sticks out to me. It elicits a primal response of paternal protection deep within my soul. My palms get sweaty as soon as I see Jim clutching that cushion and that first pink pup tumble down to earth. Maybe I am a dog person, after all. ★

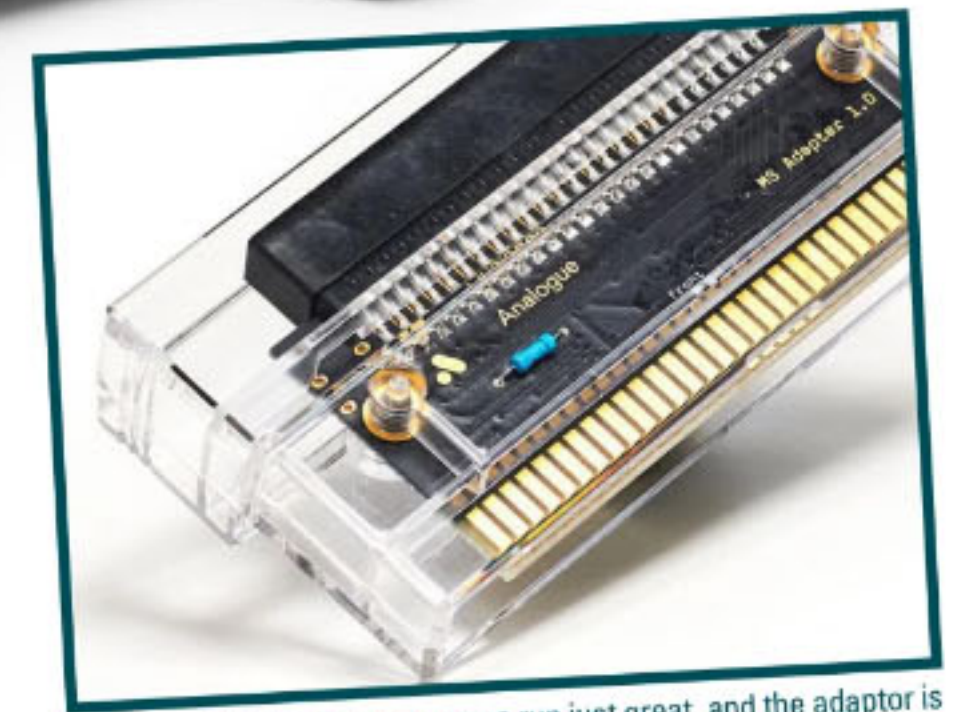




# RETRO RATED



» This month we put the Mega Sg to the test, get down and dirty with the latest Mortal Kombat and play a bunch of Konami classics



» Master System games run just great, and the adaptor is right there in the box – no extra expense required!

## Mega Sg

THE DRIVE OF YOUR LIFE

### INFORMATION

- » RELEASED: OUT NOW
- » PRICE: \$189.99
- » MANUFACTURER: ANALOGUE INTERACTIVE



We've had high hopes for Analogue's modernised Mega Drive for some time now. The

company's last console,

the Super Nt, was a highly accurate recreation of the SNES hardware in a small form factor, designed to work with modern displays and offer all the options you could ever dream of – and unlike its predecessors, the cost was not astronomical. On the surface, the Mega Sg is just as impressive an achievement, but we actually think that the latest machine is even better than its forerunner.

Like the Super Nt, the Mega Sg uses FPGA technology – rather than software emulation that interprets

a program for the hardware you're running, the FPGA is configurable to recreate a machine at the hardware level. Once again, the machine uses an Altera Cyclone V, with a core engineered by Kevin 'Kevtris' Horton. The new console comes in a similarly small form factor, smaller than both the Mega Drive and Mega Drive 2, and comes in four designs – one resembling each of the major regional designs of the Mega Drive, and a white model. The console features a cartridge port, two control ports, Micro USB power port, HDMI video output and a SD card slot for updating firmware. Like the original Mega Drive, the Mega Sg features a 3.5mm headphone port on the front, which is nice for those that want it.

Game compatibility is basically flawless, with all regions supported. We chucked every Mega Drive oddity we could find at the Mega Sg, from Titan's infamously demanding scene demo *Overdrive 2* to odd hardware like *Sonic & Knuckles'* lock-on cartridge and *Micro Machines 96's* J-cart. Everything worked perfectly, with the corner case exception of *Sonic 2's* split-screen multiplayer mode – this is down to its use of the Mega Drive's interlaced video mode, which was very rarely used. As a nice bonus, the console includes the previously unreleased



### 8BITDO M30 2.4GHZ CONTROL PAD

» Our Mega Sg was tested with this wireless controller from 8BitDo, which doesn't come with the system but is available from Analogue's shop for \$24.99. It's a modern wireless controller with a small receiver dongle that plugs into the joystick port of your Mega Sg (or indeed, other Mega Drive hardware). The controller is powered by an internal battery, charged via Micro USB cable.

The controller feels excellent in the hand – the tactile response of the buttons and D-pad is spot-on, and the ergonomic shape is perhaps even better than that of the original Mega Drive controller. Input response seems to be good, too, as we weren't able to perceive any delay even during demanding action games. Handily, there's an extra dedicated button to access the Mega Sg's menu, too.

» This slot allows you to hook the Sg up to a Mega-CD. It's a little awkward and looks weird, but there's no denying the fantastic results.



### \* PICKS OF THE MONTH



**DARRAN**  
**Pixel Puzzle Collection**  
I love playing Picross games and this latest offering from Konami is filled with lovely nods to its 50-year heritage.



**NICK**  
**Mortal Kombat 11**  
After writing last month's feature on the series, I was really in the mood for this. The classic cast and time travel madness made sure I enjoyed it.



» [Mega Sg] The image output of the Mega Sg is great, with or without the optional scanline effects.



» [Mega Sg] Mega-CD games work, too, but you'll obviously need the hardware to run them.

» [Mega Sg] When it works well, dither blending creates cool effects. When it doesn't... well, look.

Another way in which the Mega Sg shines is in its support for additional hardware. The unit comes bundled with a Master System cartridge convertor, which opens up an additional library of hundreds of games. The Master System engineering is as impressive as the Mega Drive's engineering, with full support for the console's enhanced FM sound function and separately saved settings for the 8-bit machine. The Mega Sg hides an

expansion connector under a cover on the right of the console, which allows the machine to be connected to the Mega-CD. It's not an ideal fit – a spacing mat comes with the machine, which fits underneath the Mega Sg when used with a CD unit, and it's such a small console that it looks awkward connected to such bulky devices. The good news is that compatibility is once again great, so you won't have to abandon *Sonic CD* or *Night Trap* if you choose to upgrade. However, you'll notice that Mega-CD FMV really suffers when viewed via HDMI, and the console's video options can only do so much to remedy that. It's also worth noting that you'll need your own way to bypass Mega-CD region locking, be that an internal mod or a cartridge-based solution.

game *Ultracore*, which you can read more about on page 54.

The video quality is excellent. The Mega Sg outputs at 480p/576p, 720p and 1080p at 50Hz or 60Hz, with fine scaling control and filter options. If you're nostalgic for your CRT TV, you'll find an option for scanlines with adjustable strength, as well as 'hybrid scanlines' that vary in brightness depending on the image content. Mega Drive developers commonly used dithering patterns to simulate extra colours or transparency, and the Mega Sg offers an option to blend these while maintaining image quality elsewhere. It's not perfect, and has the tendency to strip out details in small text, but you may find it useful on a game by game basis. But sound is always the biggest problem for Mega Drive clones, not helped by the fact that sound quality on original machines was variable. The Mega Sg sounded mostly correct to us when we first booted it up, but certain sounds felt more prominent than on real hardware. Thankfully, the audio is configurable with a low-pass filter, per-channel volume settings and even a setting to simulate the real hardware's 'ladder effect' distortion. With a little tinkering, we were able to achieve a close match to the sound of our real hardware, with the added benefit of digital clarity.

As good as it is, the Mega Sg isn't quite a perfect replacement for your existing hardware just yet. The Light Phaser and Menacer obviously don't work, and neither do the Master System's 3D glasses. But the biggest thing missing right now is support for the 32X library, due to the odd way the system mixed analogue video signals. Analogue states that it is "exploring solutions" to the 32X issue and the manual mentions that the Analogue DAC will provide solutions for analogue and CRT-only accessories, so keep an eye out if these issues are a deal-breaker for you.

Analogue says that further adaptors for Sega Cards, Game Gear cartridges and SG-1000 cartridges are on the way, so there's every chance that the Mega Sg gets better in the future. But as it stands, it's already an awesome piece of kit, supporting two great consoles for the price of one. It's not cheap, but if you're willing to splash the cash you'll get a truly premium experience. ★

### In a nutshell

**Analogue has gone all-out to create the ultimate Mega Drive with the Mega Sg, and it shows – and the Master System is in as a bonus. If you're a collector for either machine, you should really consider buying it.**



\* PICK OF THE MONTH

# Mortal Kombat 11

» System: PS4 (Tested), Xbox One, Switch, PC » Buy it from: Retail, online » Buy it for: £54.99

**The latest game in the *Mortal Kombat* series does almost everything right. The fast-paced fighting system has been refined and is the best it's ever been.**

The new Fatal Blow super moves can only be attempted at low health and can only hit once per match, leading to high drama and big turnarounds. You'll hit them more often than the old X-Ray moves, too, as less-potent techniques like enhanced special moves now utilise separate and constantly regenerating offensive and defensive gauges. New characters The Kollector, Geras and Cetrion fit in well with the returning cast, too.

There's plenty to do as well. The now-customary cinematic story mode is a genuinely enjoyable little time travel action tale, and it's great to see characters react to who they once were, or what they later become. Solo players can take on the Towers Of Time, a series of limited-time challenge ladders fought against opponents with specific conditions, such as tag assistants or acid rain. The multiplayer fights are great,

too, with the character customisation from the single-player game scaled back to offer two standard variations, allowing for more considered game balance.

The major blight on the experience is the game's economy, which is more befitting a free mobile game than a £50-plus console release. There's no easy way to earn any specific piece of gear or Konsumable to help in the Towers Of Time, as the items available in the Krypt are completely randomised. You can buy some specific items from a rotating selection in the store using Time Krystals, but these are dropped at a very slow rate – but you can of course buy them in bulk for real money (from £3.99 to £32.99 at a time). Worse yet is the character Frost, sold for £4.99 with no indication that she can be unlocked for free before the half-way point of the story mode. NetherRealm has stated it will address the game's economy, but the patch wasn't live before we went to press.

>> **Score 75%**



» [PS4] Time-travelling shenanigans allow for more interesting mirror match-ups.  
» [PS4] Of course Scorpion is included in the roster, he's co-creator Ed Boon's favourite character.

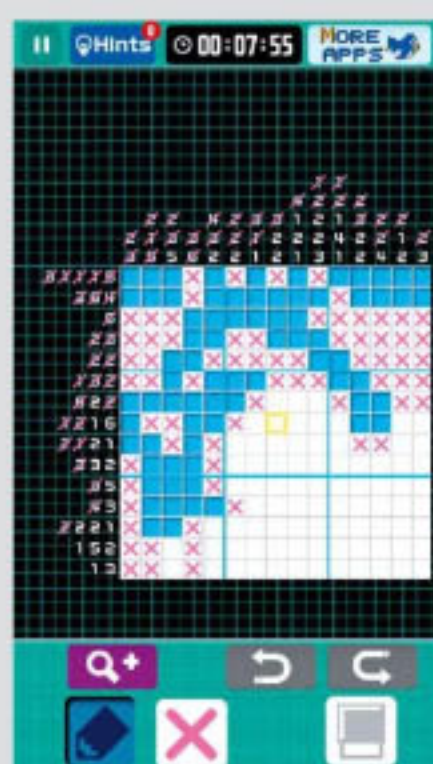


## Ultracore

» System: Mega Sg (Tested) PS4, Switch  
» Buy it from: Online, [strictlylimitedgames.com](http://strictlylimitedgames.com)  
» Buy it for: €24.99+

There's no denying that *Ultracore* would have been an impressive Mega Drive game had it originally released in the mid-Nineties – the art is excellent, it animates smoothly and the special effects are amongst the best on the system. The sound is worth mentioning, too, as the compositions are excellent. Unfortunately, the run-and-gun action isn't as impressive. It controls well and offers plenty of scope for exploration, but it suffers from difficulty issues. While the game is meant to be hard, the challenge can veer into unfair territory – you'll often be attacked by off-screen enemies, or launched into unavoidable damage. As a result, it's a test of memory as much as reflexes.

>> **Score 70%**



## Pixel Puzzle Collection

» System: iOS (tested) Android  
» Buy it from: Online  
» Buy it for: Free

Konami's scores a direct nostalgia hit with this fantastic selection of classic puzzles. While this is as bog-standard as Picross gets, the presentation is lovely and every single puzzle in the game comes from a classic or incredibly obscure Konami game. Work the puzzle out correctly and you'll be greeted by the frog from *Frogger*, the flame power-up from *Bomberman*, *Scramble*'s missiles and much, much more. The puzzles get pleasingly complex as you get deeper in the game, while time-gated boss battles, which require solving multiple puzzles to complete, will keep you going for absolutely ages. The pop-up ads can be a little intrusive at times, and it would be nice if the game pointed out your mistakes as you make them, but it's hard to quibble when you're getting so much game for the grand cost of zero pence.

>> **Score 87%**



## Arcade Classics Anniversary Collection

» System: Switch (tested) PS4, Xbox One  
» Buy it from: Online » Buy it for: £15.99

The first compilation celebrating Konami's 50th anniversary has a strong selection of arcade hits that's let down by some bizarre presentation omissions. Coded by Hamster, the emulation throughout is spot-on, with *Scramble*, *Haunted Castle*, *Nemesis*, *Twinbee*, *Life Force*, *Typhoon*, *Vulcan Venture* and *Thunder Cross* all playing as you remember. The quality of the games is strong, too, with only *Haunted Castle* and *Typhoon* letting things down, while there's a nice digital book that is full of production art. It's baffling, then, that expected options like the ability to change between the Japanese and world regions, or to use Tate mode, are nowhere to be seen. It's hard to argue at that price, mind.

>> **Score 70%**

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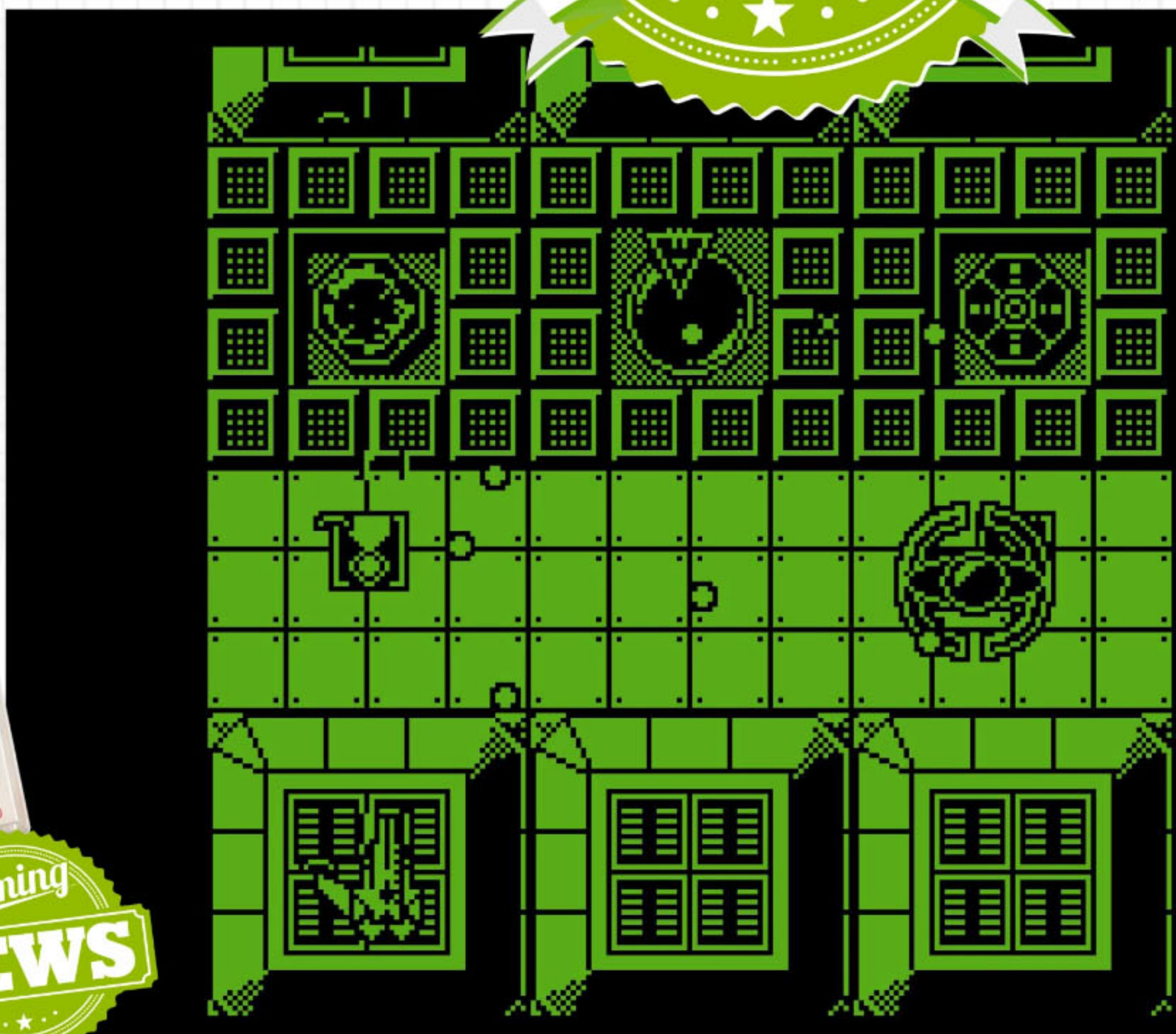


...O GAMER

# Gamers HOMEBREW

Brewing since 2005

[ZX Spectrum] Blasting through the enemy with the Redshift class spacecraft.



Gaming  
NEWS

## MISSING IN ACTION

**The ZX Dev MIA Remake competition for 2018 has recently closed and brought with it a good crop of new games.** Entrants could either pick an existing ZX Spectrum game to remake, or select something announced for the system that went 'missing in action' to create a game that could have been, and there were some intriguing entries which grabbed our attention while we were working through the list. Ultimate's titles received some remaking love with one of its earliest classics *Jetpac* visually reworked as *Elon M With A Jetpack*, and *Tiki Taca* being a version of *Atic Atac* but rendered in isometric 3D like the publisher's later games.

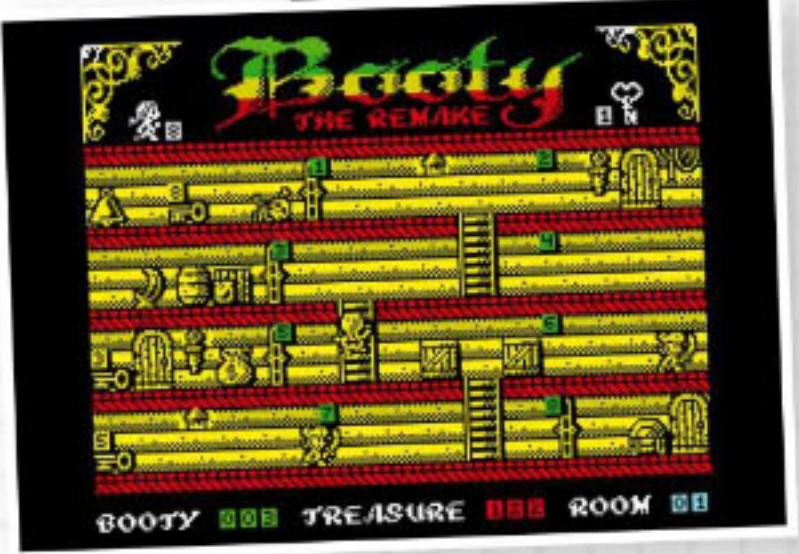
On the MIA front we've got *Droid Buster*, which is based on the unreleased game *Cyborg* and, although

that title made it out on the C64 as *Mandroid*, the developer has instead decided to start from scratch and produced their own maze-based action game. Another title only loosely taking inspiration in this way is *Ninjakul 2*, which borrows from the original *Last Ninja* but converts the gameplay to 2D and surrounds it with some neat presentation. *Ninja Gardening Simulator* is another loose implementation, this time 'remaking' *Viscious Vermin* – an advertised but currently lost Spectrum game from 1984 – by borrowing the gameplay from *Crackpots* on the Atari 2600 and adding a little ninja.

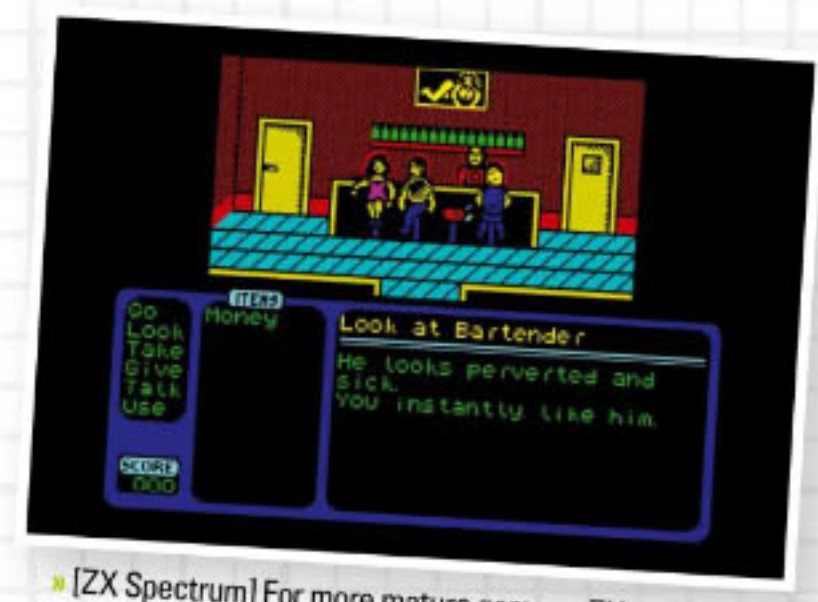
One of the more impressive-looking releases has to be *Aliens Neoplasma*, which is the development team's take on the *Alien* franchise. The devs have said it's inspired by a number

of MIA Spectrum games and has some very nicely designed graphics. Finally, there's *Redshift*, an incredibly impressive scrolling shoot-'em-up for 128K machines that is a remake of the developer's own *Galaxian 3* – not related to the Namco series – which looks to be really pushing the hardware's envelope. Everything that released can be found at [Kikstart.me.uk/zx-dev-mia-2018](http://Kikstart.me.uk/zx-dev-mia-2018).

Another competition on the go is being held by Japanese seller Beep Shop. There are categories for 8-bit, 16-bit and 32-bit systems – along with machines like the Famicom and MSX series, it's also mentioning hardware like the PC8801 and X68000 as potential platforms – with the deadline being at the end of July. [MSX.org](http://MSX.org) has translated the announcement, have a look at [Kikstart.me.uk/beep-comp-2019](http://Kikstart.me.uk/beep-comp-2019).



[ZX Spectrum] *Beaty* reworks the Eighties pirate-'em-up with improved graphics and sound.



[ZX Spectrum] For more mature gamers, *ZX Larry* is a reimagining of *Leisure Suit Larry*.



# NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: [retrogamer@futurenet.com](mailto:retrogamer@futurenet.com)



[NES] Spinning pink spiky thing incoming!

## MOJON MADNESS

The ever-busy Mojon Twins has been working on a NES game engine called *AGNES* and, as a demonstration of what the team's hard work is capable of, has also released the game *Espitene* which attempts to recreate much of the gameplay from *Sonic The Hedgehog* on the Master System.

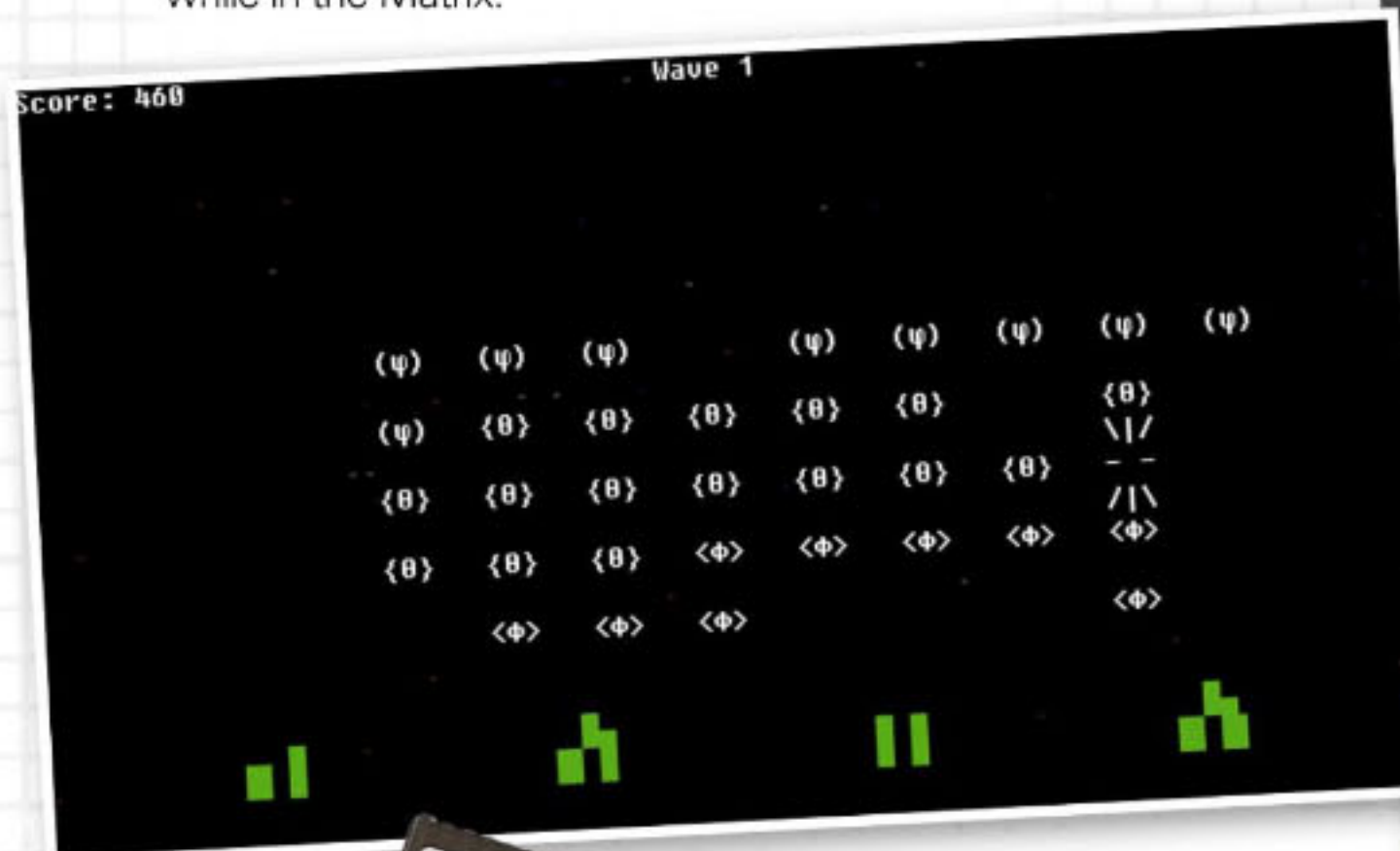
The ROM image and further information can be downloaded from the NESdev forum behind [Kikstart.me.uk/espitene-nes](http://Kikstart.me.uk/espitene-nes) – the controls are more than a little twitchy, so you'll need some practice, but it seems decently put-together from the quick test we gave it.

## GREEN SCREEN

Those pesky invaders have returned but this time they're all made of ASCII characters for some reason. Well, that's what the developer behind *Terminal Invaders* wants players to believe, since his game renders the seminal space battle as though it's being displayed by a green-screened, text-based computer terminal.

There are downloads for Windows, Mac and Linux systems over at the developer's website behind [Kikstart.me.uk/terminal-invaders](http://Kikstart.me.uk/terminal-invaders) for gamers who would enjoy a fast-paced and challenging rendition of *Space Invaders* that also emulates the experience of destroying aliens while in the Matrix.

[PC] Tremble in fear at their three different kinds of ships.



## HOME BREW HEROES

Richard Löwenstein has been working on his Amiga shoot-'em-up *RESHOOT R* since 2016, and, now its release time is approaching, we borrowed him for a quick chat about the game's history

### It looks like a lot of work went into *RESHOOT R*, how long has it taken to develop?

The roots of *RESHOOT R* can actually be traced back to the year 1991, when I began developing an Amiga shmup but failed to finish my work. I then resurrected the old source code in the year 2015 and continued to work with it, which resulted in the 2016 Amiga CD-ROM release *Reshoot*. I learned so much in this process, I simply had to put all the new knowledge and ideas into another Amiga shmup – hence I started to work on *RESHOOT R* in August 2016.

### And who was involved in making the game a reality on the Amiga?

While the basic production process, design and coding is my responsibility, *RESHOOT R* simply would not be possible without contributors from all over the world. There are too many great people involved to name them all here. But I

need to mention the Australian graphic artist Kevin Saunders and my German friend Martin Ahman for their very special engagement, excellent creativity and reliability, which is not to be taken for granted.

### Can you tell us which games or perhaps systems inspired *RESHOOT R*?

As I love fast arcadey shmups, I'd choose *Gradius*, *Hybris*, *Silkworm*, *Apidya* and of course my beloved *Last Resort*.

### Were there any features you wanted to include that fell by the wayside?

There are always ideas you'd love to implement if time and money permitted. But the game does not lack anything of importance. Maybe it would be nice not to only toggle music and SFX on and off, but also choose their volume.

### What kind of feedback have you had from gamers so far?

As the game is just a few weeks prior to release while we are talking, the final verdict has yet to be made. But people seemed to love the videos on YouTube, and also the game whenever I show it at various retro community events. I was particularly impressed when at the Classic Computing event in October 2018. A kid



THE BIG INTERVIEW

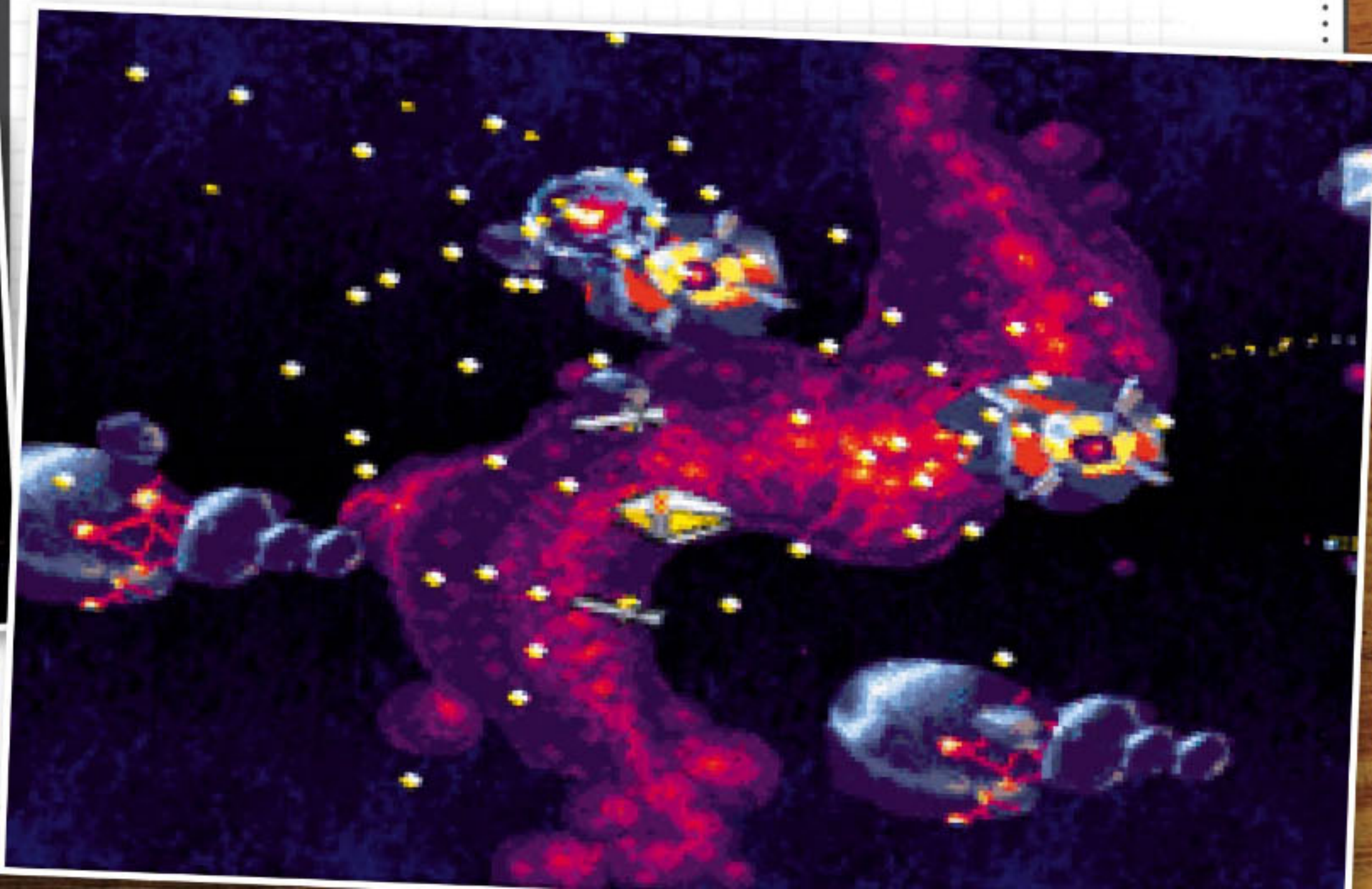
of about 12 years passed by my Amiga 1200, stopped, watched *RESHOOT R* for a few moments, then grabbed the Competition Pro. He played for about 45 minutes, then said he finds *RESHOOT R* almost as addicting as his favourite game, *Fortnite*. Can there be a greater compliment?

### How about the future, have you got any plans for more Amiga games our readers will be interested in?

Now that the technical groundwork has been laid, it'd be a shame not to use the *RR* engine for some more Amiga action. Especially as it's versatile and can be used for other genres too. Did I mention that 'jump-'n'-runs' are my other favourite genre – I'd love to code and design a new *Giana Sisters* on the Amiga. Having said that, the engine is written in 68000-Assembler language. The Mega Drive and Neo-Geo share their Motorola CPU with the Amiga, so...



[Amiga] Here's a large metallic insect, but no bug spray to dispose of it.



Gaming  
**REVIEWS**

**DO YOU REMEMBER?**

The Atari 2600 has a very serviceable and officially licensed version of *Space Invaders* which was produced by Atari itself. It was well received by gamers and, by riding on the hype generated by the Taito coin-op, helped Atari to sell a significant number of consoles.

But back in 2003 the developer of *Invaders Plus* wanted to take things a little further for a minigame competition entry.

His aim was to produce a more faithful conversion of Tomohiro Nishikado's classic arcade game and, while the graphics have taken something of a hit in order to get a full field of invaders and four ground bases onto the screen, that chunkier look can be ignored since gameplay was obviously the primary concern and on that front it fares very well. Head your way over to [Kikstart.me.uk/invaders-plus-2600](http://Kikstart.me.uk/invaders-plus-2600) and prepare to save the world.



» [Atari 2600] They may be blocky, but there's certainly lots of them.



» [Atari 2600] A UFO drifts past as the invaders get perilously low.



**STUNT CAR RACER**

» PLATFORM: BBC MASTER » DEVELOPER: BITSHIFTERS » DOWNLOAD: [KIKSTART.ME.UK/SCR-BBC](http://KIKSTART.ME.UK/SCR-BBC) » PRICE: FREE



» [BBC Micro] Heading out onto the open road... or open stunt track, at least.



» [BBC Micro] Hang on a second: is the ground really meant to be at that angle?

Legendary developer Geoff Crammond's earliest stomping ground was the BBC Micro, where he created a number of well-respected games including *Aviator*, *Revs* and *The Sentinel* which all ran on surprisingly complex 3D engines. *Stunt Car Racer* was a later outing and, while the man himself took care of the C64 version, because it arrived late in the 8-bit era the jump to systems like the BBC Micro wasn't made.

That was how things remained for around three decades as well, until Fandal's Atari 8-bit port (released in 2018) proved to be an inspiration to Bitshifters' Kieran Connell – the coder behind *Prince Of Persia* for the BBC Micro – who decided it was about time for someone to sit down with a dump of the C64's code and some development tools in order to fill the stunt car-shaped hole in his favourite 8-bit's software catalogue.

The races themselves are limited to two competitors and take place on tracks that would leave health and safety inspectors having nightmares. Not only are there no safety barriers to keep

vehicles in play, each course is elevated above the ground and constructed from steep hills, banked curves and large ramps so audiences stand a good chance of seeing some spectacular pileups as drivers fail to judge the track, engage their boost and send the car soaring into the air for a moment before it plummets to the ground. Crashing or mistiming a landing causes damage, indicated blemishes across the top of the roll cage that appear with each impact.

It might be based on similar code, but the extra speed offered up by the BBC Master's faster processor means this version of *Stunt Car Racer* is quicker on the update than either the Commodore 64 original or indeed the more recent Atari 8-bit port. That does mean the car responds more rapidly to the controls and subsequently requires some acclimatisation to get used to, but regular stunt car drivers should be ready to throw themselves around courses towards the top of the leaderboard in no time.

>> **Score 93%**



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## BERKS 4

» PLATFORM: ATARI 8-BIT  
 » DEVELOPER: JON WILLIAMS » PRICE: FREE  
 » DOWNLOAD: [KIKSTART.ME.UK/BERKS-4-A8](http://KIKSTART.ME.UK/BERKS-4-A8)



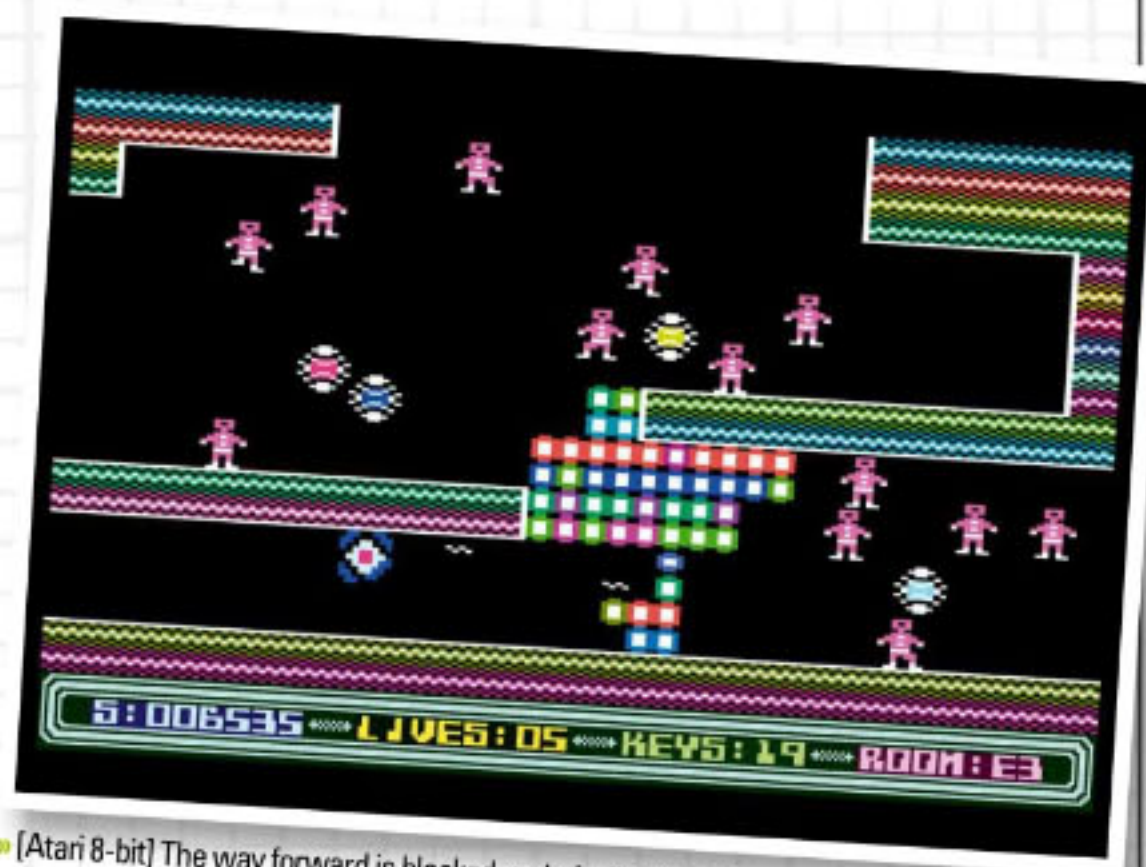
» [Atari 8-bit] That heart looks very tempting, but making your way over to it will be quite dangerous.

**The Berks are back and this time the world they inhabit is a lot larger than previous instalments in the series.**

There are four multiscreen levels to navigate your way through – the entire map for *Berks 3* on the Commodore 16 is included as one of them – with every room inhabited by nasties, but there's also keys in many locations to collect which unlock the otherwise impassable forcefields near the end of the stage and occasionally a heart can be grabbed to earn an extra life.

This is a flip-screen blaster, where learning how the enemies move and working out tactics to either shoot or avoid them within the confined spaces of the map are both important survival skills – as is understanding when to use the destructible blocks as cover. Being patient is important, too, and it's often better to wait for enemies to come to your, rather than storm your way in and power up the guns.

»» Score **83%**



» [Atari 8-bit] The way forward is blocked, so let's dig a tunnel.

## SCRAMBLE

» PLATFORM: AMSTRAD CPC  
 » DEVELOPER: PUZCPC » PRICE: FREE  
 » DOWNLOAD: [KIKSTART.ME.UK/SCRAMBLE-CPC](http://KIKSTART.ME.UK/SCRAMBLE-CPC)

**Scramble is the seminal shoot-'em-up where the player's jet must fly through six strongholds while dishing out damage to air and ground-based enemies.**

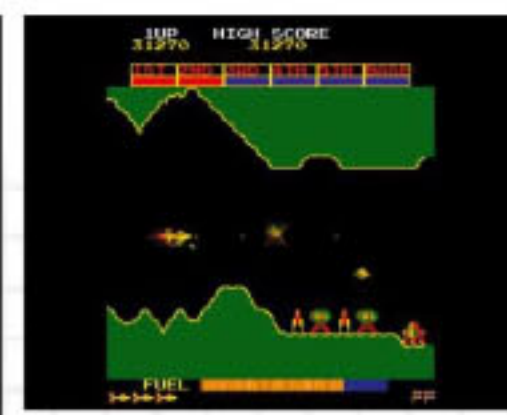
To avoid crashing into the terrain, it'll also need to refuel wherever possible by destroying fuel dumps.

Although there were several clones released for the 8-bits most of them changed details here and there, but coder

PuzCPC decided that his first game on the Amstrad CPC was going to be as close to an accurate conversion of the arcade blaster as possible and the results are very impressive.

Both the gameplay and difficulty seem to be pitched similarly to the original, the sound and graphics are pretty close to spot on, and, since it only needs 64K, *Scramble* can be enjoyed by owners of every machine in the CPC range.

»» Score **89%**



» [Amstrad CPC] How far can you invade our *Scramble* system?

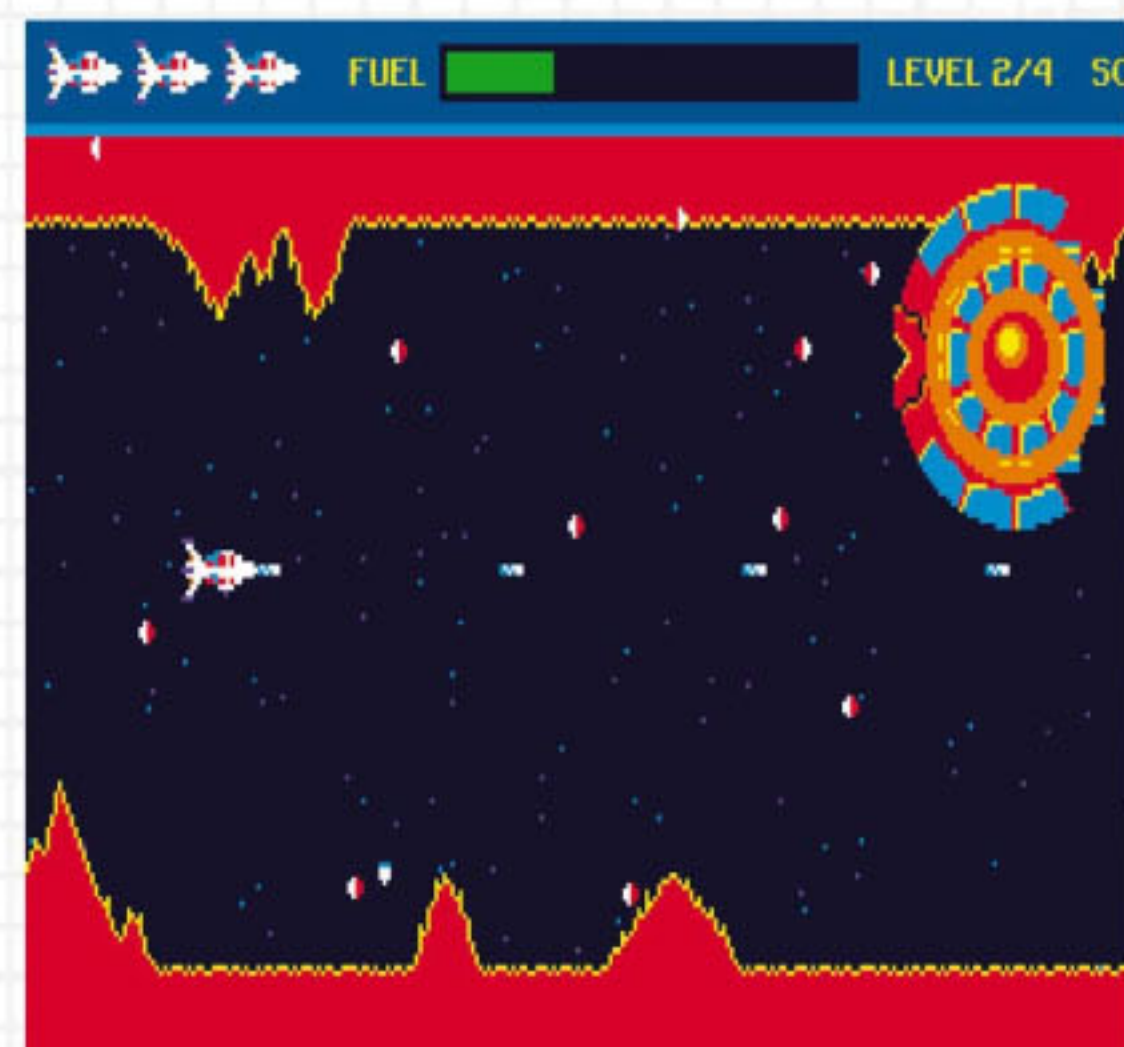
## GALAXY FORCE

» PLATFORM: WEB-BASED » DEVELOPER: BEN JAMES » DOWNLOAD: [KIKSTART.ME.UK/GALAXY-FORCE-WIN](http://KIKSTART.ME.UK/GALAXY-FORCE-WIN) » PRICE: FREE

**You wait ages for a version of *Scramble* to arrive and then two turn up at once!** But this version differs from the above one because it was developed as part of the Bullet Hell Jam 2019, so there are lots of bullets whizzing around your ship and bosses at the end of each stage, along with the coin-op's familiar elements, such as ground-to-air rockets and fuel dumps – the fireballs have been replaced by enemy ships that turn up more frequently but they can be blasted.

*Galaxy Force* is a far busier-looking experience than its arcade original muse, and those changes do drastically alter how the game feels as a whole, but it's pretty solid for something that was – impressively – created in four days. The fuel gets a little tight on the fourth stage, but the difficulty isn't as steep as Konami's original so experienced shoot-'em-up fans will possibly find this a little easy.

»» Score **80%**



» [PC] Here's a boss, something you don't usually get in *Scramble*.



## ROUNDUP

**Some naughty pixies have stolen all of the tiles from your mosaics.** While you haven't got complete instructions to repair each piece of artwork there's a C64 program called *Nono Pixie* which contains notes that indicate where the black tiles are for each row and column so, with a little logical thinking and perhaps some trial and error, it should be possible to get things back to normal. More info at [Kikstart.me.uk/nono-pixie-c64](http://Kikstart.me.uk/nono-pixie-c64).

We move from pixies to magical ponies now, with a work-in-progress Atari 8-bit conversion of Flash game *Adventure Ponies*. The player must take control of a pony in order to search for the Elements Of Harmony while navigating hazards and taking on adversaries. Ponies can jump and shoot as they explore the world, and their quest begins at [Kikstart.me.uk/adventure-ponies-a8](http://Kikstart.me.uk/adventure-ponies-a8).

# COLLECTOR'S CORNER

READERS TAKE US THROUGH THE RETRO KEYHOLE

## SINCLAIR ZX SPECTRUM

"My first computer, so I've got to include it as it's the one that got me into computing properly. This one was lurking around the university, so I adopted it!"

PAID: £0



## SINCLAIR QL

"I really wanted one of these at the time, but all I could afford were the magazines that reviewed and previewed it!"

PAID: £80



# OLD SCHOOL

Steven Furnell shows off his impressive home computer-focused hoard

## BIO

**NAME:**  
Steven Furnell

**AGE:** 48

**LOCATION:**  
Plymouth

**ESTIMATED VALUE:**  
£20,000-£25,000

**FAVOURITE CONSOLE OF ALL TIME:**  
Dreamcast

## MERLIN

"After seeing a TV news report in the Seventies, I wanted one and it became my first electronic device. I think I got this one, minus a battery cover, from Cash Converters."

PAID: £30



This month's collector hails from the nautical south coast city of Plymouth. Originally from Cornwall, Steven Furnell has assembled an impressive collection, and is fond of posting pictures of hardware, games and books on social media. This collector, however, has gone one step further, putting a large majority of his collection on display at the University Of Plymouth, where he works as professor of information security.

"The idea originally came about around ten years ago when I was head of school and we were looking to give some identity to the corridors," says Steven. While describing the displays as a museum would

be a bit of a stretch, the carefully curated collection of computers and consoles is readily available for students and guests to view throughout the School Of Computing at the university. "We had the idea of getting some cabinets and displaying student project works, and for fun I put in a few retro computing devices in them as a holding position," continues Steven. "This seemed to be well received, so I needed little encouragement to get some more cabinets and expand the display."

As his collection is displayed within the university, the main daily visitors consist of staff, visitors to the department and students. "I often wander down the corridors and find people stopping to look at the cabinets," notes Steven, "and you normally hear snippets of, 'I used to have one of them,' and so on. The students themselves tend to be surprised by the size, appearance and specs of some of the machines." Known as the South West Retro Computing Archive, Steven's collection boasts famous machines such as the Commodore 64, Sinclair ZX Spectrum and Acorn BBC, along with obscurer

computers like the Yamaha CX5M and the Acorn Archimedes. Consoles are less represented, but there's still room for a range of handhelds, several varieties of Grandstand Pong units and an Atari 2600. In addition to the regular displays, Steven also holds events in order to show the retro love. "We've done a number of retro computing and gaming events over the years for the regional branch of BCS, the chartered institute, as well as related talks for the local network of the Institute Of Engineering And Technology," he explains. Many of the machines also get an airing for the university's annual science and technology showcase event, giving attendees a chance to sample computing history first-hand.

Given its location, the archive serves as an appropriate reminder of how far technology has progressed in a relatively short time. "I tend to say to computing students that much of the archive isn't really *that* old, with many of them [arriving] within the last 40 years or so," says Steven. "And it's worth thinking that 40 years is roughly the working lifetime for the students once they graduate, so during their careers

Got an impressive collection of your own? Contact us at:

f RetroGamerUK @RetroGamer\_Mag ✉ retrogamer@futurenet.com



### MATTEL INTELLIVISION

"This would've been my console of choice if I could've had it in the Eighties."

PAID: £50



## JEWEL IN THE CROWN

### MAGNAVOX ODYSSEY

"I bought it off eBay around 16 years ago. It's in good condition, boxed and has all the bits such as screen overlays. Perhaps less fun to actually play it, but it's part of history, and that's its main value to me."

PAID: £100

they can expect to see the technology transformed to at least a similar degree." The systems are maintained on a voluntary basis, with Steven's colleagues Paul Downland, Bogdan Ghita, Ismini Vasileiou and John Welsh all contributing in various vital ways. To learn more about the archive, visit [retro-computing.org](http://retro-computing.org). ★

## BARGAIN HUNT

Your guide to the rising world of retro prices

### THE COVER STAR BURNOUT

Luckily for the reckless drivers out there, the original *Burnout* is easy to catch out in the wild – and it's cheap, too. Expect to fork out a mere **£2** for the PS2 and Xbox versions (plus postage if applicable) with GameCube-flavoured vehicular mayhem likely to set you back – gasp – **£4-£6**. Most of the follow-ups, bar the latest, are also available for under **£10**.

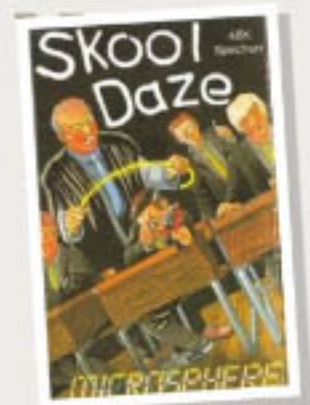


### YIE AR KUNG-FU

The majority of all of the home computer conversions of this arcade game can be picked up cheaply, whether in their original clamshell or Hit Squad re-releases. The chief exception is the MSX cart, a boxed copy of which usually sells upwards of **£20**.

### SKOOL DAZE

This school yard classic is common, yet popular, meaning it regularly commands around **£10**, a decent amount for a Spectrum game. The budget re-release by Alternative usually mirrors the original price of **£1.99**, a good option for those wishing to revisit the happiest days of your life on the cheap.



### EARTHWORM JIM 2

Thanks to its release late in the life of the Sega Mega Drive, *Earthworm Jim 2* is, while not exactly rare, not cheap as chips. If you want to experience life as a humorous annelid in this excellent follow-up, you're probably looking at losing between **£30 to £40**, depending on the condition of the box and game.

### THE X-FILES: RESIST OR SERVE

As you may expect with such a recent release, this PlayStation 2 *X-Files* game always sells for less than **£10**, with many auctions ending at around a fiver, posted.

### HOW MUCH?!

### SINCLAIR ZX SPECTRUM

March saw a brace of ZX Spectrum computer eBay auctions reach somewhat eye-watering levels. Both claimed to have never been switched on, with a 16K model selling for **£921** while an impeccable 48K model eclipsed even that with a final hammer price of **£1,040**, we wonder if they work?



Prices correct at time of print

# MAILBAG

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# WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books



## ★ STAR LETTER

### THE ULTIMATE GAME

Dear **Retro Gamer**,  
As the great Nolan Bushnell once famously said, "All the best games are easy to learn and difficult to master." I therefore put it to you, dear **Retro Gamer** reader, that Taito's masterpiece *Bubble Bobble* is the ultimate videogame.  
It's perfect for the casual gamer. It has just four commands, and yet it represents a huge challenge for even the most hardcore. Anyone that's completed it on one credit has either got world-class skills or is a big fibby cheat. There are loads of levels that get pretty fiendish later on, secrets to discover and multiple

endings going on long before these things became de rigueur.  
The graphics are cute as hell with a great cast of characters, and the music is jaunty. It can be played co-operatively or competitively and is suitable for all ages and abilities – a five-year-old and their gran could play it together!  
Can anyone name a videogame that has such a broad appeal and is so perfect in every way? I'd say only the likes of *Tetris* comes close, and that doesn't have adorable dragons in it.  
Yours,  
Davey Sloan (aged 43 and a quarter)



» [Arcade] Is *Bubble Bobble* the perfect game? Davey Sloan certainly thinks so.

What a great letter, Davey. We're big fans of *Bubble Bobble* and you've made some good arguments for why it has stood the test of time so well. You've convinced us to fire the game up and have a go.



» [PSP] We've not had a *Tactics Ogre* game in the west since the remake of *Let Us Cling Together*. It makes us sad.

### A TACTFUL REQUEST

Hello, **Retro Gamer**,  
I live in the states and am a new subscriber to your magazine. I am aware that you probably receive hundreds of requests like this a day. However, I wanted to ask if you have ever done a review on the *Ogre Battle* series in your magazine? Games in the series include *Ogre Battle* (SNES), *Tactics Ogre* (PlayStation/SNES), and *Tactics Ogre: The Knight Of Lodis* (GBA). Every issue I wait and hope/pray that it will be reviewed in your magazine.  
Thanks again and take care,  
Andrew Press

**You have great taste in strategy games, Andrew. Darran is a big fan of the *Ogre* series, but we've never done anything significant on it due to the developers being difficult to get hold of. We'll keep our fingers crossed that we can sort something out in the future.**

### AN EVENTFUL TIME

I just wanted to drop a line to not only show support for my favourite magazine, but also to say how much I love getting the calendar with it each year. I've taken to hanging the calendar up at work, and, as I work in IT, it creates some fun conversations about what consoles and computers my fellow nerds had as kids.  
It makes a nice break from complaining about our kiddies and struggling to keep up with the younger team members' gaming habits (mostly as I'm jealous of all their free time).

Sadly, no one has said anything about owning a CPC this month.  
All the best, and keep making a rad magazine.  
Scott Gage, South Australia

**We're glad you like the calendars Scott, we quite enjoy using them ourselves. Rest assured that there will be a brand-new *Retro Gamer* 2020 calendar plopping its way through your letterbox towards the end of this year.**

### WHAT AM I?

Dear **Retro Gamer**,  
I was chatting about classic SNES games with my best friend the other week and we got into an argument about *UN Squadron*. My friend is convinced that you could play it co-operatively on the SNES, while I told him you couldn't. Which one of us is right? There's a tenner riding on the answer.  
Regards,  
Ben Parker



» [SNES] Sadly, Ben won't be able to use his winnings to buy a copy of *UN Squadron* as it's too expensive.



» [PS2] *Hit & Run* was an enjoyable alternative to *GTA*. If you support a sequel, sign Hassaan's petition.

### SIMPSONS HIT AND FUN

Dear **Retro Gamer**,  
I have set up a petition online campaigning for a sequel to the popular game, *The Simpsons: Hit & Run*. I'd absolutely love it if you could share this on your website or magazine. Head to [bit.ly/SimpsonsHitAndRunSequel](http://bit.ly/SimpsonsHitAndRunSequel).  
Hassaan Mohammad

**Our pleasure, Hassaan. It's unclear if we'll ever see a sequel, but there's no denying that EA's game was a nice alternative to *Grand Theft Auto*. Good luck with the petition.**



CONTACT US

Snail Mail: Retro Gamer, Future Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: retrogamer@futurenet.com

Good news, Ben, your friend owes you a nice, crisp tenner. You're quite right: the arcade had a two-player mode, but it didn't make its way over to Nintendo's console.

CAN I GET A REMIX?

Dear Retro Gamer, The C64 remixes included with recent issues have been great. I wonder if there is any chance of including Rob's own remix of Sanxion from the Zzap!64 issue 26 mega tape? I've long since lost that, but it remains one of my favourite bits of music; it's up there with JM Jarre, in my opinion. Thrust was my favourite of Rob's C64 work, and Warhawk was also excellent so it's good to see he's revisiting that. Finally, it's not one of Rob's and was not mentioned in your recent Tetris article, but the 20-minute long C64 Tetris theme by Wally Beben is a brilliant and haunting piece of music. Thanks for listening. Andy Fletcher

Glad you're enjoying the CDs, Andy. We'll do some investigating for you.

COLLECTION CONCERNS

Dear Retro Gamer, I was looking at my collection of games the other day and I came to the



Our CD collections are proving really popular. Let us know what you'd like to see next.

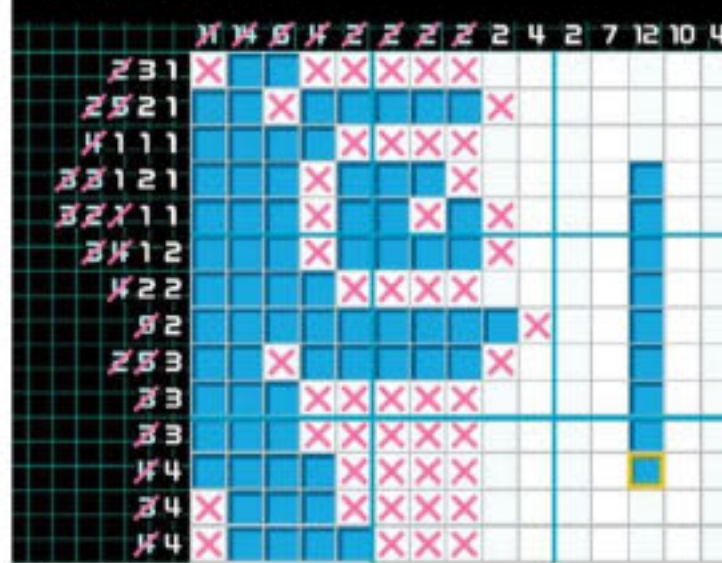
conclusion that I have far too many. I have close to a thousand different titles across 20 or so systems, and if I'm honest I'm a little overwhelmed by how much stuff I have. What should I do? Should I sell off most of my unplayed games and start afresh, or focus my collection on the systems I love most (Amiga, Spectrum and PlayStation) and my love of the Castlevania series? I feel like I have more games than I can ever possibly play, and I don't really know what to do. Yours hopefully, Paul Jenkins

Thanks for getting in touch, Paul. Your suggestions do sound like they might give you the focus you're looking for, but it's really up to you. Good luck with the pruning.

DISCUSSED THIS MONTH

Picross Panic

The team has been awfully quiet recently because they've been engrossed by Konami's Pixel Puzzle Collection on iOS and Android. Nick managed to complete over 30 per cent of the game's Picross puzzles over a weekend, and Darran and Drew have taken to playing it during tea breaks.



[DS] If you're after Castlevania recommendations, Paul, we'd recommend Portrait Of Ruin.

Your say

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know...

What's your favourite Burnout game?

Louis Walker

Burnout 2, because of its sheer simplicity.

@ErikWelleweerd

Burnout Legends (PSP version). It was so great to finally play a good handheld Burnout game. Every now and then I play this game, and it's so good.

Gary Cullen

Burnout 3, especially on Xbox with the custom soundtrack option! It really needs a HD remaster on current-gen systems.

@glitchedheart

Burnout Paradise. The open world is the perfect environment to complete challenges in, or make up your own.

Jamie Martin

Burnout 3: Takedown. Not only was it the best game, but I also got to know my wife because of playing this together at a Blockbuster store!

ely

Burnout 3, purely because of the introduction of takedowns. The Road Rage mode often helped me de-stress after a bad day at work.

Jaysen Mercer

The first one, because it wasn't so overblown with 'features.' I just wish it had a better replay mode.

@JIGOKUSHOUJO

Burnout 3: Takedown, no matter what skill level the player was, everybody got something out of it.



[Xbox] Unsurprisingly, Criterion's excellent third Burnout game remains the most popular with our readers.

It was the perfect way to waste an evening with a few friends and a couple of drinks, it was just fun.

@g\_karmena

Burnout 2. When I was a kid, I skipped school to play this game.

Sven Teuber

Burnout Paradise, because that's the only one I've played so far (and

it features Paradise City as its title track).

@TweetMLee

Burnout 3 was Criterion's teenage rebellion. Swaggering with EA's backing, unshackled and injected with adrenaline and no fear. We got a hyper, post-punk, metal-smashing festival that Criterion never quite matched again.

Future PLC Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Editorial

Editor Darran 'DJ DJ' Jones darran.jones@futurenet.com 01202 586237

Group Senior Art Editor Woz 'DJ Wheezy' Brown Production Editor Drew 'DJ Playable' Sleep Senior Staff Writer Nick 'DJ Waifu' Thorpe Photographer Neil Godwin

Contributors

Writing Luke Albigés, Hareth Al Bustani, Adam Barnes, Martyn Carroll, David Crookes, Paul Drury, James Hoyle, Jason Kelk, Graeme Mason, Rory Milne, Paul Rose, Paul Walker-Ernig

Art George Hodsdon, Catherine Kirkpatrick

Advertising

Media packs are available on request Commercial Director Clare Dove clare.dove@futurenet.com Advertising Director Tom Parkinson tom.parkinson@futurenet.com Account Director Kevin Stoddart kevin.stoddart@futurenet.com

International

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Circulation

Head of Newstrade Tim Mathers

Production

Head of Production Mark Constance Production Project Manager Clare Scott Advertising Production Manager Joanne Crosby Digital Editions Controller Jason Hudson Production Controller Vivienne Calvert

Management

Chief Content Officer Aaron Asadi Commercial Finance Director Dan Jotcham Brand Director, Games Matthew Pierce Editorial Director, Games Tony Mott Head of Art & Design Rodney Dive Group Senior Art Editor, Games Warren Brown

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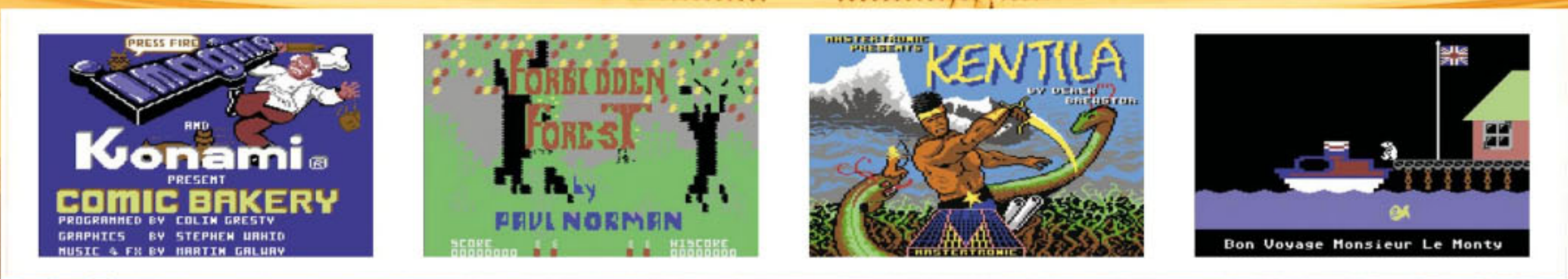
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# ENDGAME

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» Do you know why Shaggy runs from monsters? It's not because of fear of what they'll do to him – rather, it's for fear of the cataclysmic consequences that would be unleashed if he used even a fraction of his true power to repel them. So Scooby and the other passengers in the Mystery Machine had better figure out this latest caper quickly, lest everyone within a 500 mile radius be vaporised...



01 » While assuming a human form, the entity known as Norville 'Shaggy' Rogers has a limited top speed. "Like, zoinks Scoob! If that monster gets much closer, you're all gonna find out how the dinosaurs felt when that asteroid hit!"



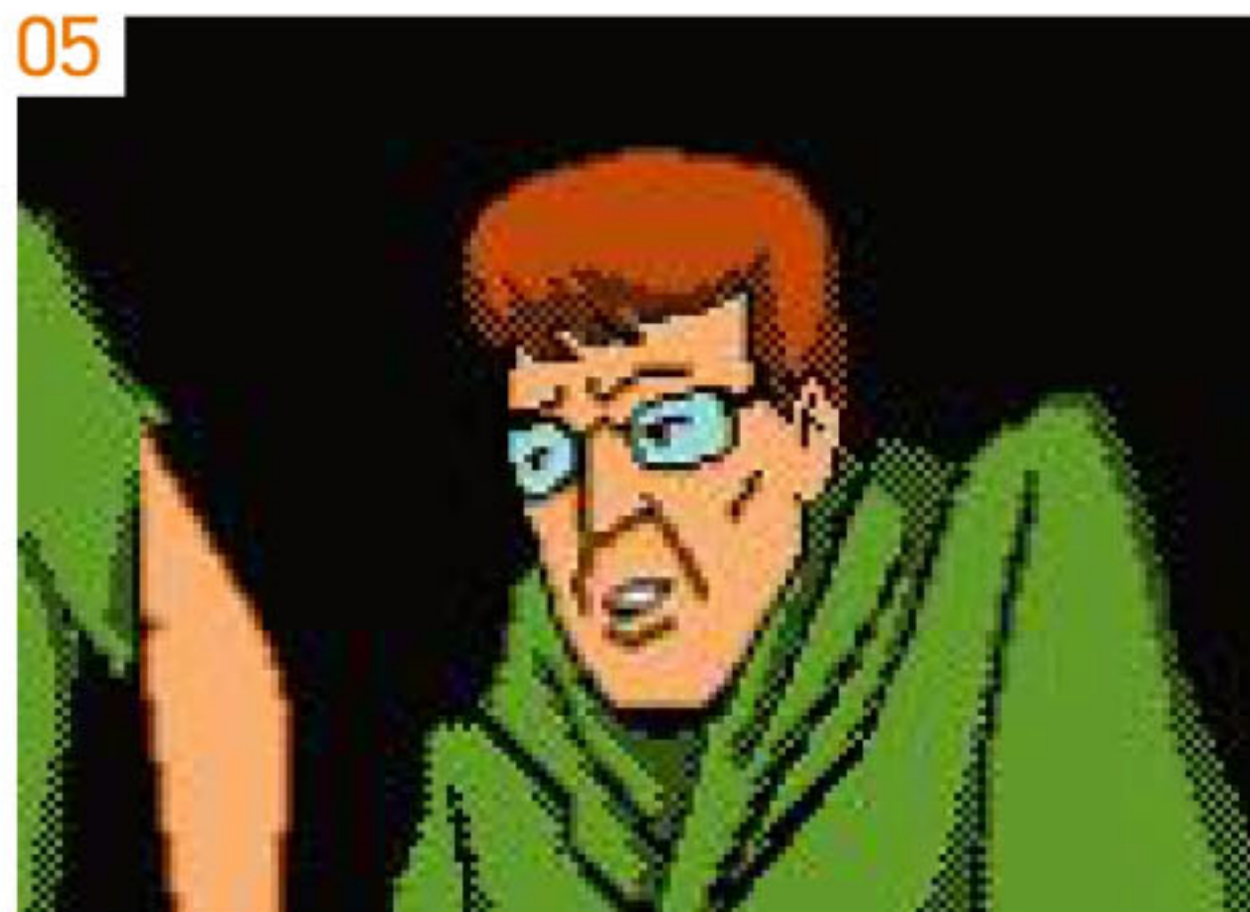
02 » The inhabitants of Earth are once again the beneficiaries of good fortune, as a water spill trips up the monster and allows Shaggy to reclaim his personal space. The air in the room noticeably cools as he calms down.



03 » Daphne and the rest of the gang arrive to chuck a net over the villainous creature, and though it doesn't look like it offers any real restraint, it does miraculously keep the odd green thing grounded. The world is safe.



04 » But now it's time for the unmasking. Who could this dastardly doer of dirty deeds be? Mr Burns? JR Ewing? Vince McMahon? Jacob Rees-Mogg? Martin Shkreli? Piers Morgan? Negan? Doctor Robotnik? The Master? Peter Mandelson? Skeletor? Go on, just reveal the villain – the suspense is killing us.



05 » With a collective gasp, we learn that it is... someone we've never seen before. This is what happens when you skip straight to the end of a story, we suppose. Still, Shaggy has been placated, so the world is safe – for now. Take us away Velma! "Jinkies," she says. Jinkies indeed.



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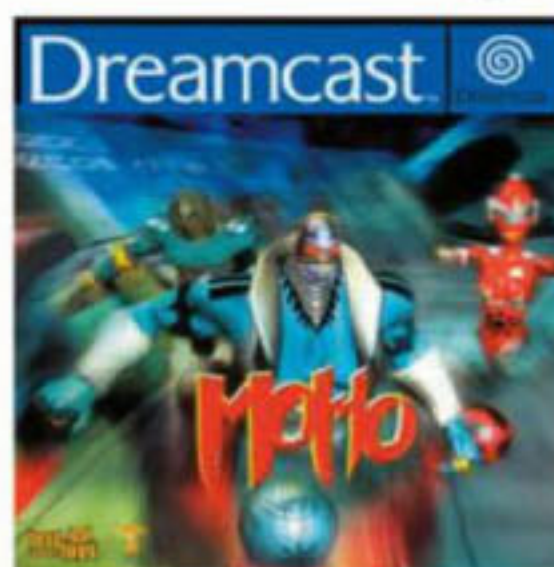
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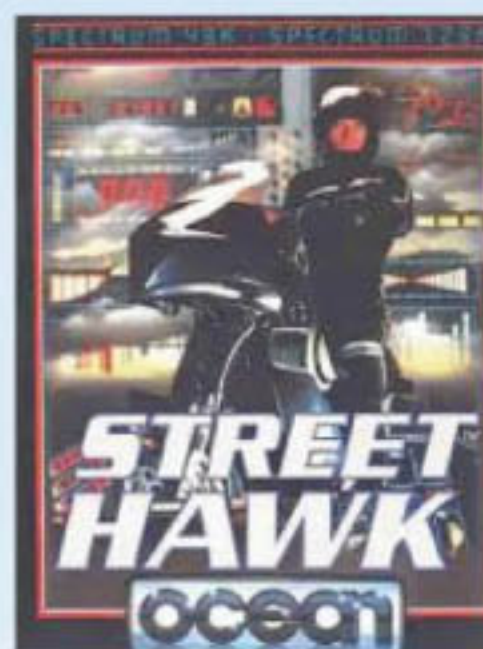
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